JANUARY 1998

THE UNESCO COURIER

Frugality
a way to a better life?

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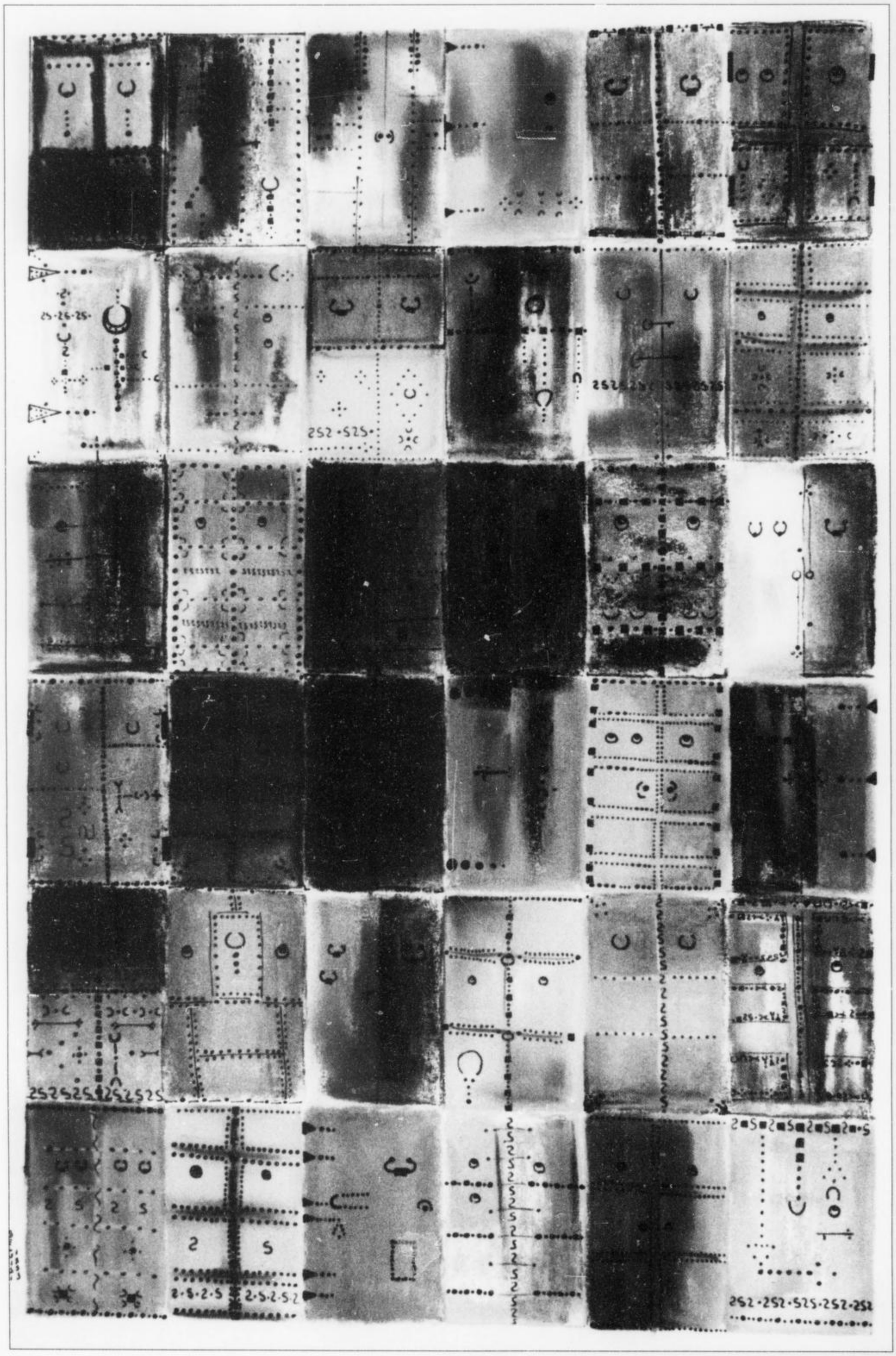
INTERVIEW WITH LUIS SEPÚLVEDA

ENVIRONMENT: CITIES—RESIDENTS TO THE RESCUE

HERITAGE: MOUNT ATHOS (GREECE)

ENCOUNTERS



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ET LE VENT DE SFAX

1997, pastel and ink
(81 cm x 65 cm)
by Jean-Baptiste Belvisi

Doors of buildings in the Medina of Tunis are depicted in this pastel by Jean-Baptiste Belvisi, a Tunisian-born artist who lives in France. Together with members of his family and figures from Arab mythology, they are a recurrent theme of Belvisi's work, which seeks to recreate the atmosphere of his Tunisian childhood. The artist makes extensive use of pastel to evoke the colours reflected on the doors of the old city in the morning and evening light, and says, "My pastel stick is my bridge between East and West." As a sign of his desire to strengthen the fragile link between the two worlds, he used the expression *Trait d'union* ("Hyphen") as the title for a recent exhibition held in Tunisia of his works on the door motif.

© Jean-Baptiste Belvisi, Nantes

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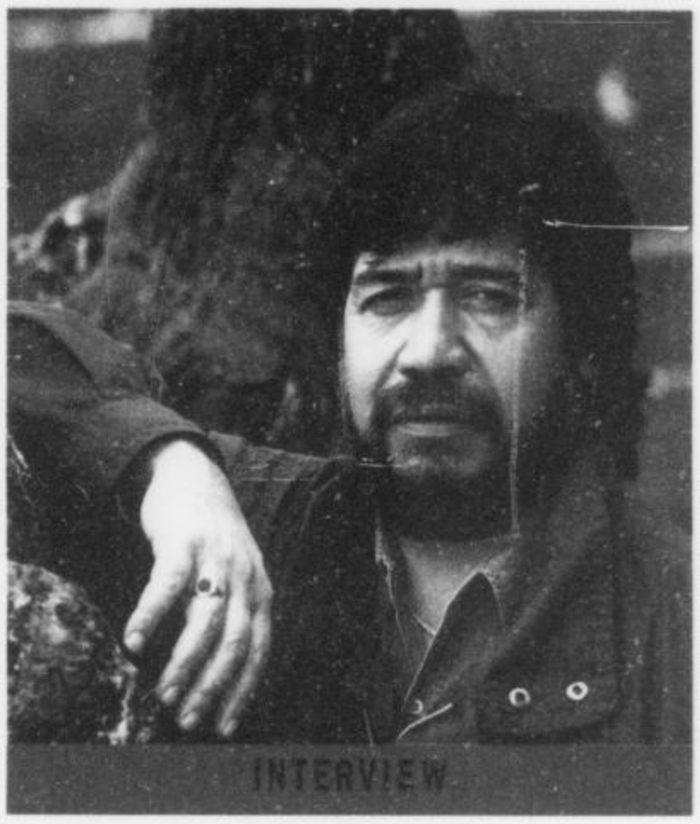

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INTERVIEW

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Luis Sepúlveda

An award-winning Chilean novelist and traveller talks about his adventurous career marked by prison and exile.

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Mount Athos (Greece)

Treasures from the "Holy Mountain" on display to an international public for the first time.

Cover:

Fietsfeest '96 ("Bicycle Festival") held in Amsterdam (The Netherlands) in July 1996 attracted more than 15,000 cyclists.

© Roland Nooteboom, Amsterdam

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a way to a better life?

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month by month

by Bahgat Elnadi and Adel Rifaat

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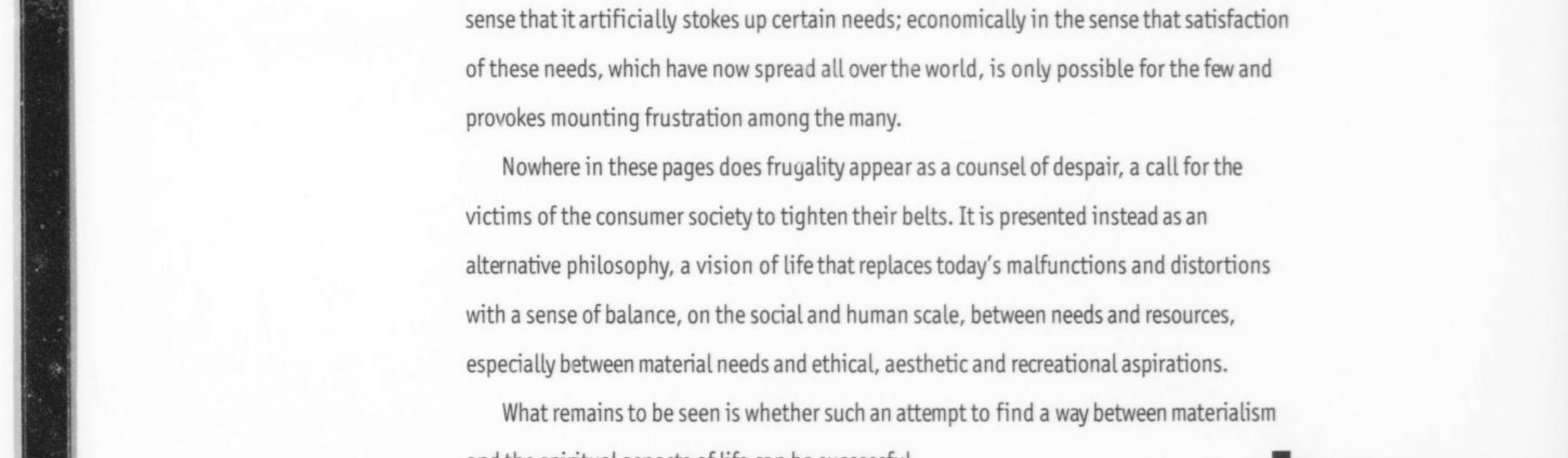
This issue explores the idea of frugality in its most positive sense. Not as deprivation enforced by lack of resources or as willed abstinence but as moderation of conduct—eating habits being only one aspect of this—responding to a need to strike a balance and to draw an acceptable line between the necessary and the superfluous.

But who should draw this line? And according to what criteria? Here there is considerable room for subjective opinion. Even if it is accepted that a minimum of quantitative, objective needs must be met in terms of food, clothing and housing, it is clear that history, culture, tradition and hierarchies of values are bound to have a big say when it comes to defining quality of life. To take just one example among many, the idea of well-being is bound to vary depending on whether or not one is used to the standards of comfort associated with the consumer society.

For the consumer society is here challenged on two counts. Philosophically in the sense that it artificially stokes up certain needs; economically in the sense that satisfaction of these needs, which have now spread all over the world, is only possible for the few and provokes mounting frustration among the many.

Nowhere in these pages does frugality appear as a counsel of despair, a call for the victims of the consumer society to tighten their belts. It is presented instead as an alternative philosophy, a vision of life that replaces today's malfunctions and distortions with a sense of balance, on the social and human scale, between needs and resources, especially between material needs and ethical, aesthetic and recreational aspirations.

What remains to be seen is whether such an attempt to find a way between materialism and the spiritual aspects of life can be successful. ■



A subversive idea

BY PAUL EKINS

The values of frugality fly in the face of the prevailing economic order

It is doubtful whether many people would subscribe openly and explicitly to the notion that human happiness derives exclusively, or even mainly, from the consumption of goods and services, or that the only, or even main, way of increasing that happiness is to increase consumption. So it is surprising that this notion has come to exercise a near-dictatorial power over public policy, and thence over the way societies are run and over the directions in which they are constrained to develop. How has this situation come about? What results has it had? What would be the rationale for, and some of the implications of, an alternative view of how human happiness comes about, in which frugality plays a significant role?

Clearly all living things need to consume in order to stay alive, and humans are no exception. The use of matter and energy is necessary to sustain our bodies and to protect us from hostile environments. Many, but not all, human societies have also sought to achieve more than this by generating (often through the use of slave or forced labour) surpluses over and above basic consumption needs in order to build civilizations. But until relatively modern times the goal of such civilizations was not simply to increase aggregate consumption. While they seem to have been no less fond of wealth and power than modern societies, they also had complex belief systems which provided them with explanations of human life and purpose that went far beyond accumulation and consumption.

Windfarm turbines in the state of Gujarat, northwest India.

© Daniel O'Leary/Panos Pictures, London

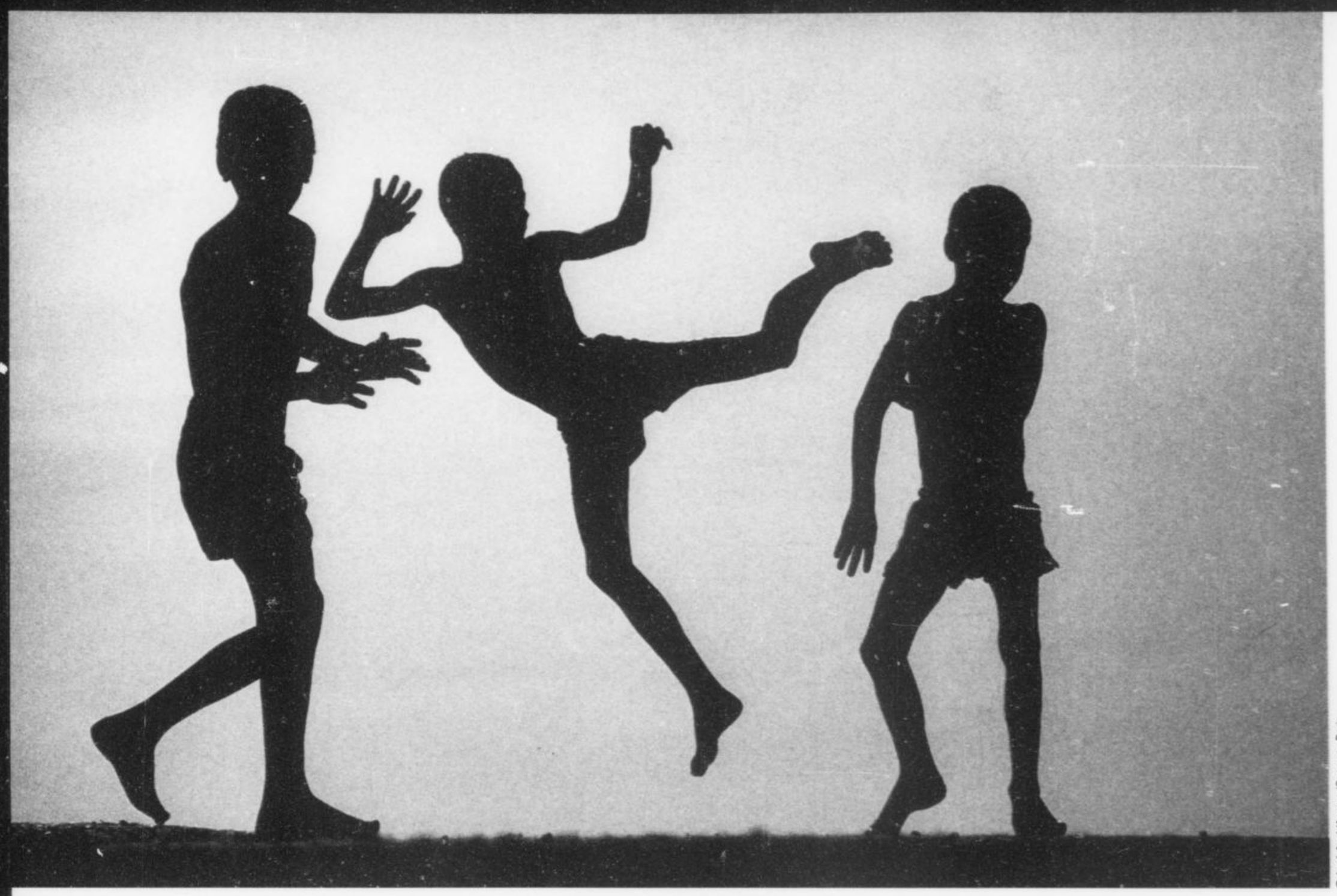
Economic growth: benefits and costs

It was the conceptualization of "the economy" as a macro-social entity, and of economics as a macro-social science, rather than as household management (which is the root meaning of the word) that began to stress the importance of consumption as an end in itself. Adam Smith, often called the father of economics, wrote: "Consumption is the sole end and purpose of all production." As the economy has come to dominate public discourse, and as the only goal of economics is to increase consumption, which it views as synonymous with human welfare, this has become the prime objective of modern societies. No matter what the question, in practical politics economic growth is the answer. This primacy is acknowledged in the collective term used to describe Western industrial societies: consumer societies.

At least for those who tried it first the project of increasing consumption has been phenomenally successful in its own terms. Economic output in the early industrialized economies has increased by orders of magnitude over the last 200 years. This has brought many benefits to the populations which have participated in this growth. These benefits should be neither denied nor belittled. They are so obvious to those who do not yet have them that in practically every country of the world their achievement has become the principal social project.

But with these benefits have gone costs. Most obviously the explosion of consumption, coupled with the growth of human population, and the vast increase in the use of energy and materials that have accompanied them, have put unprecedented pressure on natural systems.

Other costs are less easy to measure and quantify but are no less keenly perceived. The processes of capitalistic accumulation through competition in markets, the promotion of which is now generally considered to take priority over all other social objectives, have led to what can only be described as profound social unease. Social institutions, like the family or community, disintegrate or degenerate; anti-social behaviour—crime, vandalism, drug abuse—proliferates; unemployment becomes less cyclical and more structural at higher levels,



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Children at play in Bahia (Brazil).

and threatens previously secure white-collar employees; countries that try to sustain comprehensive systems of social security find them an unsustainable economic burden, those that do not experience sharp increases in inequality; and, finally, social values of trust, integrity and public service are eroded by the increasing identification of personal success with private gain.

Clearly not all these phenomena are equally evident in all countries, but they are ever more apparent in both industrialized and industrializing societies. Not only are they negative effects in themselves, but they threaten to render the growth process unsustainable. Growth in all the old industrial economies is substantially slower in the 1990s than in previous decades. It is at least possible that these economies are beginning to experience social as well as environmental limits to growth. This is potentially traumatic in a society for which economic growth is the be all and end all of social purpose. Perhaps it is time to ask whether there are other sources of human happiness which could be given a higher social profile and receive greater emphasis in public policy.

Once sources of human happiness apart from consumption start to be identified, they seem so obvious that it is difficult to understand how they were ever allowed to be marginalized by the quest for economic growth or compromised by its consequences. They include: stable, caring families; secure, convivial communities; meaningful and satisfying work; good health; a sense of personal identity and social purpose; a diverse, beautiful and sustainable natural environment; and open, participatory and democratic societies.

Clearly these sources of happiness are interrelated in many different ways. Equally clearly they can be, and have been, adversely affected by a pursuit of economic growth that does not recognize their value. A question then arises as to what concept may be able to temper modern societies' obsession with growth in order to give weight to some of these other sources of human happiness. This is where the idea of frugality may have a role to play.

Downshifting

In a society devoted to consumption, it is hard not to identify frugality with notions of sacrifice, of "doing without" or "giving things up". Such identifications are, however, misplaced. Certainly frugality implies modest consumption and simplicity in personal lifestyle. But these are not motivated by abstract asceticism or self-denial, but from a perception that frugality in consumption permits a greater emphasis to be placed on other aspects of human experience, which are actually more personally rewarding and fulfilling than consumption. Far from entailing self-denial, frugality in this reading is a means of liberation. An all-absorbing concern with consumption is replaced by the pursuit of other values that yield more happiness.

This may seem fanciful, but in fact just ▸

▸ such a calculus is at the heart of the growing movement of "downshifting" which has taken place in recent years, especially in the United States. Downshifters are people who, by reducing their employment commitments, and therefore their income, have chosen some or all of the following: to have more time with their families; to contribute to their communities; to do more work of their own choosing; to experience less stress; to reduce their impact on, and/or increase their contact with the natural environment. So much momentum had this movement gathered by 1995 that the *Wall Street Journal* was openly speculating whether so many people refraining from market-based consumption could have a depressing effect on share prices. Such a concern well expresses how deeply subversive frugality is of the prevailing economic order.

However, a commitment to frugality in order to have the time and attention to concentrate on other sources of human happiness and fulfilment is entirely in line with some recent theories of human motivation and behaviour. For example, the American psychologist and philosopher Abraham Maslow postulated that humans have a hierarchy of needs, in that they seek first to satisfy material needs of comfortable survival and security, then are concerned with social needs, including being accepted and esteemed by their social group, and then direct their energies towards the satisfaction of self-actualization needs, seeking to act in accordance with ideals of love, truth, justice and aesthetics in order to realize a higher human purpose. In this framework increasing material consumption is irrelevant to human fulfilment once a reasonable standard of living has been attained. The striving for further consumption is indicative of psychological fixation and immaturity, a failure to progress to the realization of higher human potentialities.

The Chilean economist Manfred Max-Neef's

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"Some societies had belief systems which provided explanations of human life that went beyond accumulation and consumption." Above, the Forum, ancient Rome's religious, political and business centre. Watercolour by Theodor Hoffbauer (1914).

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A family living on the island of Mindanao (Philippines).

classification of human needs is similar, except that he rejects Maslow's hierarchical arrangement, believing that satisfaction of material and non-material needs is sought simultaneously. He identifies nine fundamental human needs (subsistence, affection, protection, understanding, participation, leisure, creation, identity, freedom), satisfaction of which is sought through four modes of experience (being, having, doing, interacting). The means of satisfaction Max-Neef calls "satisfiers". Some satisfiers only satisfy the needs to which they are directed, while others synergistically satisfy other needs as well. Less positively, there are "pseudo-satisfiers", which do not really satisfy the relevant need; "inhibitors", which satisfy one need but simultaneously inhibit the satisfaction of others; and "violators" which militate against the satisfaction even of the need to which they are directed. Examples of these non-satisfiers might be status symbols (which unsuccessfully seek to address the need for

identity), over-indulgence in watching television (a leisure pursuit which inhibits creativity) and the arms race (which sought to give both sides protection but ended up making them both less secure). From this perspective overemphasis on material consumption is often evidence of a counter-productive fixation with pseudo-satisfiers, inhibitors or violators. Conversely, embracing frugality can be a means of liberation from negative satisfiers involving material consumption, in order to concentrate on satisfying needs of which consumption is not and cannot be an authentic satisfier.

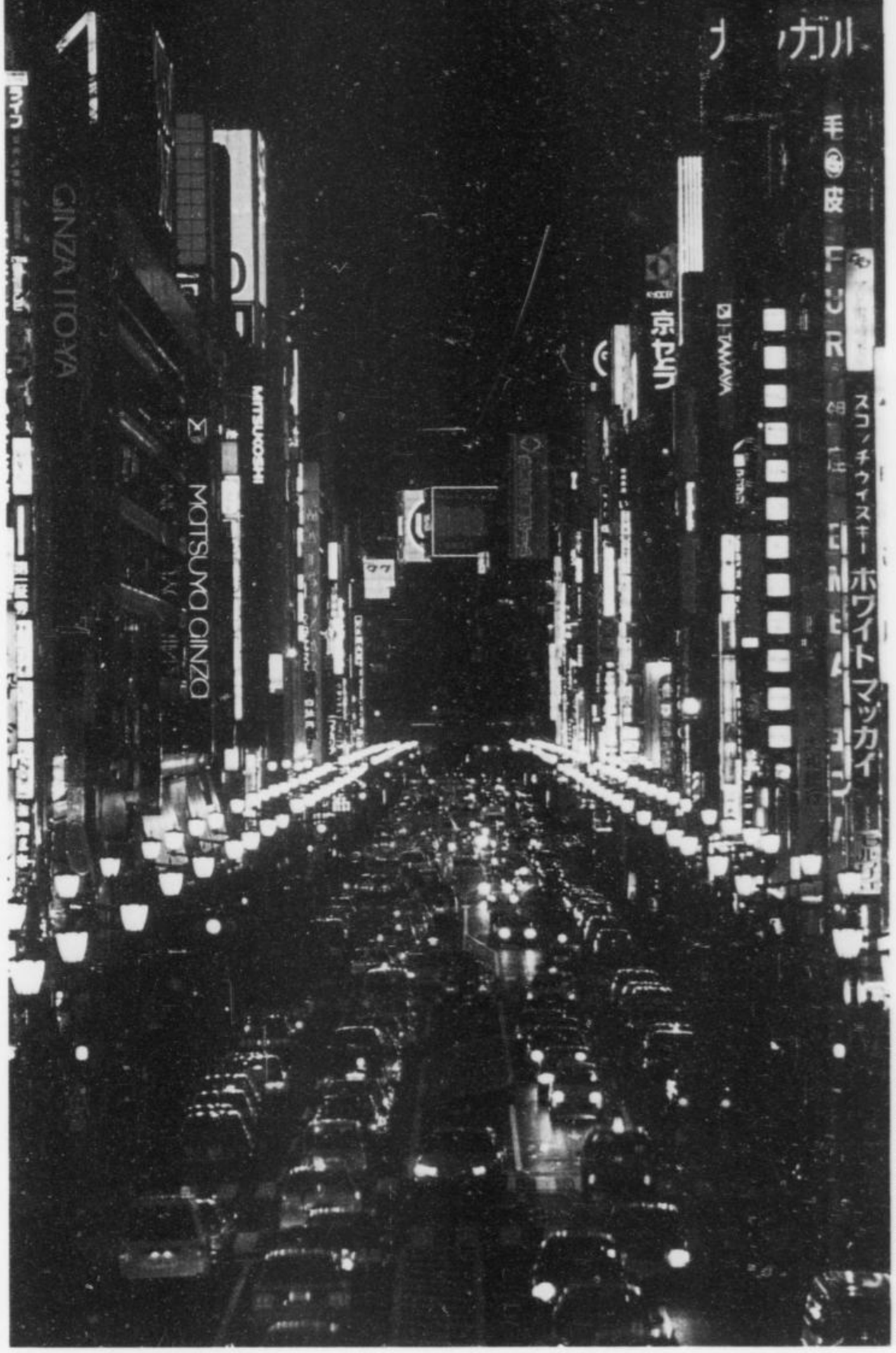
It seems, therefore, that frugality is a valid, and perhaps a necessary, value of a society that is truly promotive of human fulfilment. This raises questions as to why it occupies little or no space in the social psyches of industrial cultures, and why frugality as a value (if not material deprivation as a fact) is increasingly being driven out of societies worldwide. The answer to the second question is largely historical and has to do with power and empire. Put crudely, cultures geared to increasing material consumption developed more powerful weapons than those which valued frugality, permitting the former to conquer, and colonize or enslave the latter. Decolonization and independence generally failed to restore traditional values of frugality, the residual of which have suffered a further sustained assault from the globalization of Western commerce, culture and consumerism.

Unresolved contradictions

The answer to the first question renders very problematic the rediscovery of frugality in capitalist industrial societies. In such societies, where the achievement of greater material consumption has become the dominant social objective, economic growth is a condition not just of supposed greater human well-being, but also of basic economic stability. Capitalism operates through the generation of economic surplus that accumulates into capital and generates more production through investment. Unless economic growth is in prospect, capitalists will not invest. Economic growth requires increased consumption, even in the richest societies in the world. Such a requirement is hardly consistent with a resurgence of frugality.

Moreover, under capitalism, work is organized as employment. The profitability of business is increased when labour becomes more productive, and the whole thrust of technological development has been and is to raise labour productivity. Yet without economic growth increased labour productivity in a given labour force means greater unemployment, with all its attendant personal misery and social strain. If a new commitment to frugality were to hold back growth in consumption, but the forces increasing labour productivity were to continue to operate, then frugality would have produced unemployment, which is hardly a recipe for human happiness even among the more frugally inclined.

Developing new institutions and ways of working that can resolve the contradictions between frugality as an individual value and the social need under capitalism for investment, economic growth and more jobs, will not be easy. It will only happen, of course, if the quest for frugality becomes a far more widespread and potent social movement than is currently the case even with regard to downshifting in the United States. If greater adherence to the value of frugality is indeed a necessary part of the solution to the environmental destruction and social degeneration brought about by materialistic consumerism, the transition whereby frugality is either accommodated to capitalism, or transforms it into a different social and economic system, is likely to be a rough ride. ■



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"Perhaps it is time to ask whether there are other sources of human happiness apart from consumption." Above, a shopping street in Tokyo (Japan).

Is frugality a virtue?

BY JAMES GRIFFIN

If not an end in itself, frugality can lead to a better quality of life

Does frugality have some sort of ethical status? Or is it just an optional "life-style"—admirable in its way, perhaps, but admirable as lavish life-styles can be too? Is frugality any more firmly rooted in values than luxury is?

Or is it, perhaps, valuable only in special circumstances, when food or clothes or other goods are in short supply and sparing consumption is only good sense? Is it a virtue in the Third World but not in the First? Is it appropriate in some settings and wildly inappropriate in others?

Well, let us see where frugality might fit into ethics. It is not a virtue, at least in the sense that philosophers use that word. It may be a virtue in a popular, everyday sense: that is, generally a good thing, a thing to be admired or praised. I shall come back to that possibility in a moment. By a "virtue" philosophers mean a disposition that will carry one through typical trying circumstances in life, when, without the virtue, one's spirit would be either deficient or in excess.

Temperance is the classic virtue closest to frugality. A temperate person does not react to testing circumstances with either too much heat or too little, too much desire or too little. Temperance is defined as striking a certain sort of desirable balance. But what is suspicious about frugality is, precisely, that it stands resolutely at one extreme: sparing use. But why is that the right balance? And balance between what vices? On one side of *sparing use* we might see *waste*. But what is on the other side? On the other side we might see hurtful *under-consumption*. But why should we regard frugality as the ideal balance between these two evils? One could go well beyond frugality into a fairly liberal use of goods without crossing over into waste. Why is this greater liberality not the more desirable balance?

Nor, I think, is frugality intrinsically valuable. Imagine, first, a frugal life: I am careful and sparing in all that I use; I consume enough for health but no more than is required for me to meet simple, basic needs. Now imagine a non-frugal life: I am less vigilant about and more liberal in what I use; I consume more than is strictly needed for my basic needs but I do not waste anything. Now, if one sees each

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The cultivation of "deep personal relations" is an aspect of the good life that societies based on consumption tend to relegate to the background. Above, Mayan clay figurines (8th-11th centuries, Campeche, Mexico).

of these lives simply as the lives I have just described and apart from any consequences that they might have, is there any reason to say that one is better than the other? I at least can see no reason to think so.

So if a frugal life is in some way valuable, it must be because of the things that it leads to. It must be, not intrinsically valuable, but instrumentally valuable.

And here, it seems to me, there is an interesting case. Frugality strikes most modern people as out of date—and that no doubt for different reasons. It seems appropriate to a life of scarcity and as the world grows richer, frugality grows irrelevant. And Freud will have had something to do with it: we suspect that behind a frugal exterior there is an unattractive, anal-retentive interior. But, most of all, our modern value system seems to have gone over to a form of consumerism. We are dominated by an economic model of the quality of life. A human is seen as a complex of desires. The quality of a human life is seen as in direct proportion to the satisfaction of these desires. The social sciences, and through them the popular consciousness, are dominated by this desire-satisfaction model of value.

But its dominance is now, fortunately, weakening. The theory is poor. One cannot equate what makes a person's life good with what satisfies that person's desires. It is possible—in fact, all too common—for a person's desires to be satisfied and the person be no better off. For example, I may desire revenge on someone—indeed it may be the strongest desire in my life—yet find that when I have it I am no better off, even possibly worse off.

An instrument for good

Nothing becomes valuable just by being desired. Some things in life just are valuable and others not. That is a strong claim, and a much disputed one in philosophy, but it seems to me right. I think that, with experience, we can compile a list of the valuable things in life—the things that may not make absolutely any life better (people are too various for that) but that make normal human lives better. My list would contain at least these unsurprising things: enjoyment, deep personal relations, accomplishing something in the course of one's life, understanding certain basic metaphysical and moral matters, autonomy, and liberty.

Consumerism is not just weak in theory. It does not work out happily in practice either. ▶

The quest to understand metaphysical and moral issues is also widely regarded as an element of the good life. Below, the Japanese monk-poet Fujiwara no Nobuzane (ink and paper, 12th-13th centuries).

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Above, Virgil meditating on his poem *The Aeneid*, flanked by the muses Clio and Melpomene. A Roman mosaic from Tunisia (3rd century B.C).

▶ One all too common feature of the life of a modern consumer is that one set of desires is satisfied only to be succeeded by a new set, with no advance in quality of life. These consumerist desires often form a treadmill. One runs but makes no real advance. When that happens, it is clear that one has lost sight of values. What are really valuable are the things on the list that I just mentioned. And other things are valuable, valuable in a secondary, instrumental way, if they lead to the values on the list.

This, it seems to me, is where frugality comes in. It is valuable if, and only if, a frugal style of life is generally conducive to some of the values on the list. There is much to be said for that. A frugal life avoids the more value-destroying forms of consumerism. A frugal life tends to be a simple life, and, though simplicity in life is not guaranteed to put one in touch with real values, it substantially increases the chances that one will be. Many of us, from time to time, have had the experience of living more simply than we usually do and finding ourselves, as a result, more in harmony with what matters in life. Of course, we return to our everyday life and lose this precious insight. That is another reason why a frugal life-style can be valuable. One's style of life not only can embody values; it can also be the best way

to open one's eyes to values that one would otherwise be blind to.

That is to say that frugality can, in this instrumental way, be a personal good. It can also be a community good. A frugal community can save and invest for a better future. Frugality can also be a global good—indeed, a little more frugality may be necessary simply to avoid global disaster. We consume fossil fuels without serious constraint. We justify ourselves with the thought that advancing technology will be sure to come up with substitutes for them. But just as good? Without undesirable side-effects? We do not really know. And our consumerism pollutes the atmosphere, producing global warming. We certainly do not know all the consequences in store for us from that.

But I must not end with praise of frugality. My life is better for my living simply on holidays, consuming much less than I normally do. But then I live in the prosperous part of the world. I *choose* simplicity. But millions of people are forced to consume sparingly. They are destitute. Their lives are not better for it. The big killer in the world is not war or periodic famine. It is something undramatic and unreported: chronic malnutrition. Chronic hunger, some claim, kills eighteen to twenty million people annually, which is over twice the number that died annually in the Second World War. Their sparing consumption is nothing but evil. ■

© Giraudon, Paris. Tchehel Sotun, Isfahan (Iran).

"A frugal life tends to be a simple life and increases one's chances of being in touch with real values." Right, a woman writing. (Detail from an Iranian fresco,16th-17th centuries).

Plain living and high thinking

AN IMAGINARY INTERVIEW WITH THE GREEK PHILOSOPHER EPICURUS

© Anderson/Viollet, Paris. National Museum, Naples (Italy)

A bust of the Greek philosopher Epicurus (341-270 B.C.) from Herculanum (Italy, 3rd century B.C.)

■ **Posterity has seen you as a pleasure-seeker and your philosophy as pure hedonism—the opposite of the truth, since your whole philosophy of pleasure revolves around the idea of moderation. But what is it based on?**

Epicurus: Firstly, on the idea that pleasure is the beginning and end of a happy life. We seek pleasure only when we are suffering as a result of the absence of pleasure, and when we are not suffering, it is of no concern to us. Secondly, on an ordering of our desires: some are necessary, others merely natural, and yet others vain. By necessary desires we mean those that relieve some pain, like the desire to drink when we are thirsty; by natural but not necessary desires, we mean those that simply diversify our pleasures without relieving pain—like the desire to drink good wine. Among vain desires is the desire to offer wreathes or erect statues.

Desires which, if unfulfilled, do not cause pain are not necessary. They involve an appetite that may easily be restrained whenever it is hard to satisfy, or when it is harmful. Natural desires whose non-fulfillment does not cause pain and which take the form of a violent appetite are desires formed by an empty mind. Such pleasure as they bring comes not from them but from our vanity.

■ **In what forms of behaviour is this ethic expressed in daily life?**

Epicurus: The simplest of dishes give as much pleasure as a groaning board when the suffering caused by want is absent. Bread and water afford the keenest of pleasures to those long deprived of them. Leading a simple, modest life is thus a good way to stay healthy, and moreover enables a man to face up stout-heartedly to the tasks that life imposes and to better appreciate occasional high living, and fortifies him against the fickleness of fortune. Hence, when we say that pleasure is the supreme good, we are not speaking of the pleasures of the debauchee, nor of sensual abandon, as is claimed by certain ignorant persons who take issue with us and misrepresent our thinking. We are speaking of the absence of physical suffering and of moral disquiet; for neither drunken revelry nor continual feasting, nor the enjoyment to be had from consorting with catamites and women, nor yet that deriving from tables heavy laden with fish and meats, none of these afford a happy life, but reasonable and sober habits, reason ever seeking after legitimate causes of election or aversion and rejecting any opinions that might greatly trouble the soul.

The principle underlying all this, and at the same time its greatest benefit, is prudence. It must be adjudged superior to philosophy itself, since it is the source of all the virtues, which teach us that happiness cannot be attained without prudence, honesty and justice, and that these things cannot be obtained without pleasure. Indeed, the virtues originate from a happy life, which in turn is inseparable from the virtues. ■

Adapted from *Peri biôn dogmatôn kai apophthegmatôn tôn en philosophia eudokimêsantôn* ("Lives, teachings and sayings of famous philosophers") by Diogenes Laertius

Three exceptional figures

BY ADAM ROBERTS

Frugality as a moral and political protest against the established order

© Viollet Collection, Paris

Epictetus
(50-125 A.D.)

Frugality implies care or sparingness in the use or supply of food and other resources. The first "frugal" people were those who lived by gathering fruit (*fruges* in Latin), and were designated as frugal by the Romans, whose life has also been described as "a frugal thing, sparing in food, temperate in drink, modest in clothing, cleanly in habit." I would suggest that a frugal person is one who is able to make informed decisions concerning his or her use of resources, and does so believing that moderate consumption allows other pleasures or benefits to be enjoyed.

The lifestyles of frugal individuals illustrate how the idea of "frugality" differs from others such as meanness or prudence. If frugality is to do with making rational choices about consumption and how to live one's life, frugal persons must have the opportunity not to be frugal and yet choose to be this way. To adopt a frugal way of life is to adopt an ethical, if not a political, position. Here are some examples:

Stoicism was prominent between 300 B.C. and 180 A.D., as a philosophy and a guide to right conduct. Roman Stoics were interested, almost exclusively, in ethical and political issues of concern to all people, not only the privileged few. Four beliefs characterize the Stoics' view of the world: that all people are radically equal and part of the natural universe; that there are natural laws; that a person should live in perfect conformity with nature; and that fate is determined. The text *Encheiridion* contains Epictetus' thoughts, many of which reflect his attitude towards consumption and frugality. Here is his advice to a young man sitting down to a great feast: "But if when things are set in front of you, you do not take them but despise them, then you will not only share a banquet with the gods but also be a ruler along with them." Here is a sign that frugality is a political action. Choosing to control, strictly, how you consume is a controversial act. Epictetus warned about this too, and discouraged his followers from showing off: "When you have become adapted to living cheaply as far as your body is concerned, do not make a show of it, and if you drink water do not say at every opening that you drink water. If you wish to train yourself to hardship, do it for yourself and not for those outside." ❐ ▶

Henry David Thoreau

(1817-1862)

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A young, Harvard-educated American, Henry Thoreau chose in 1845 to live alone for two years in a wooden forest hut not far from Concord (Massachusetts). While his university contemporaries were away making small fortunes, trading and dealing, Thoreau built his hut using a few hand tools and some old planks, planted beans and listened to the water ripple in Walden pond. Ridding himself of the trappings of a "civilized life" and trying to live self-sufficiently, he was repeating the experience of the early American settlers. The difference was that he wrote about it, and celebrated the virtues of a simple life. "The ancient philosophers, Chinese, Hindoo, Persian and Greek, were a class than which none has been poorer in outward riches, none so rich inward," he enthused, hoping to emulate them in both respects. His book *Walden* (1854) is a manifesto against modern industrial life and an account of the two years when he drank water from his pond, had a diet of pulses and possessed a minimum of objects. He wrote that he would rather "sit on a pumpkin and have it all to myself, than be crowded on a velvet cushion." In his hut there were only three chairs: one for solitude, two for friendship and three for society.

He did all this by choice, aware that he had an option to return from such a life to a more "comfortable" one, but confident that "the so-called comforts of life are ... positive hindrances to the elevation of mankind." However, Thoreau eventually chose to opt out of his life-style, and after two years he returned from the woods to write and publish his book. But because of his experience he felt he had become a wiser observer of human life "from the vantage point of what we should call voluntary poverty." ❐

Mahatma Gandhi

(1869-1948)

© Hartingue Viollet, Paris

'The Great Soul" Gandhi is a powerful example of a man who used issues of frugality and poverty in his philosophy, politics and private life. In 1888, when he moved from India to Britain, he joined the London Vegetarian Society. There he met George Bernard Shaw and the travelling lecturer and socialist Edward Carpenter, who was then known as the "British Thoreau". At that time he read the *Bhagavadgita*, which would become his "spiritual dictionary", and became fascinated by two Sanskrit words in particular, *aparigraha* (non-possession) and *samabhava* (equability). These influences led Gandhi to have an "irresistible attraction to a life of simplicity, manual labour and austerity", and the belief that man has to jettison the material goods that cramp the life of the spirit.

Ever since St. Francis of Assisi sought a life of poverty, chastity and humility, those who have preached such values have been seen as dangerous by authorities. Thus, when Gandhi moved to South Africa and set up as a farmer near Durban, where he and his friends could live a simple life by the sweat of their brow, he took the first step towards becoming a controversial political activist. Gilbert Murray later warned, about Gandhi, that "Persons in power should be very careful how they deal with a man who cares nothing for sensual pleasure, nothing for riches, nothing for comfort or praise."

Six years later, Gandhi moved nearer to Johannesburg, and set up another farm, which he named Tolstoy, after the great Russian writer with whom he corresponded. Soon he began his political career, campaigning against racial laws in South Africa and the removal of voting rights from "coloured" voters. Back in India, he took frugality to its extreme, by conducting fasts for political ends (he also fasted to "stir the conscience and remove mental sluggishness"). In 1947 he fasted in an attempt to stop rioting between Hindu and Muslim communities in Calcutta. Four months later, in Delhi, such a fast brought about another communal truce. ❐

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8

From zero towards one

INTERVIEW WITH SHIOUN MICHIKO NAKASATO

■ **Are the drawings shown here inspired by calligraphy, like most of your works?**

Michiko Nakasato: Yes. In calligraphy you try to express yourself simply with lines and dots using two colours, black and white. White signifies space, which changes its features according to what you write on the sheet. It could be spring or autumn, for example, depending on what the artist wants. When you make the first stroke on a white sheet of paper, you should imagine doing it on the ocean. This first stroke is very important. You are making a mark on a vast space where there is nothing, and with this stroke the whole space becomes alive too. I thought of this when I did these drawings.

■ **What does the word 'frugality' signify to you?**

M. N.: I associate the notion of frugality with the presence of a strong individuality. It is not something imposed by others. It is a determination to return to a life in which there are only essential elements. Of course these elements differ from one person to another. Each person's choice must be respected.

■ **What do you mean by the title 'From zero towards one'?**

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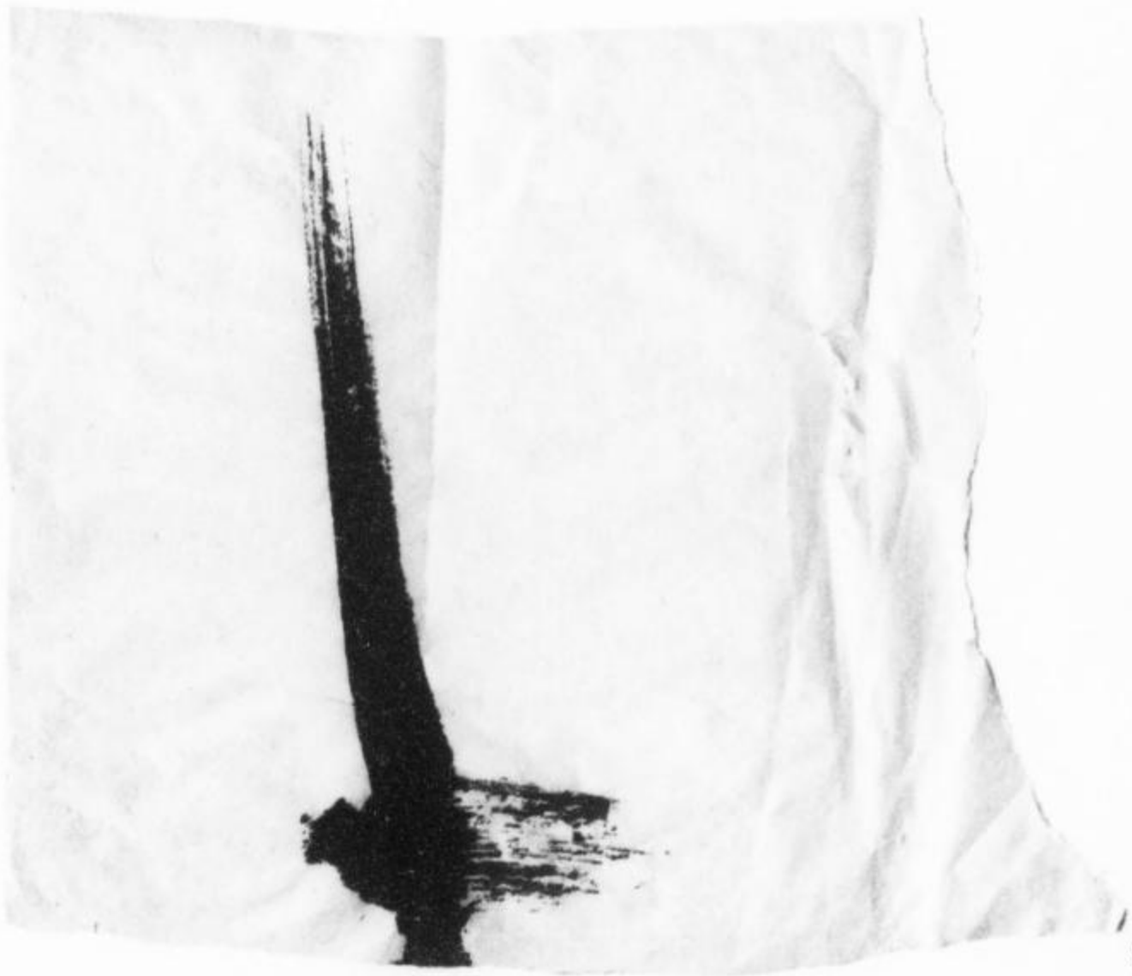
1b

1c

Drawings © Shioun Michiko Nakasoto, Paris



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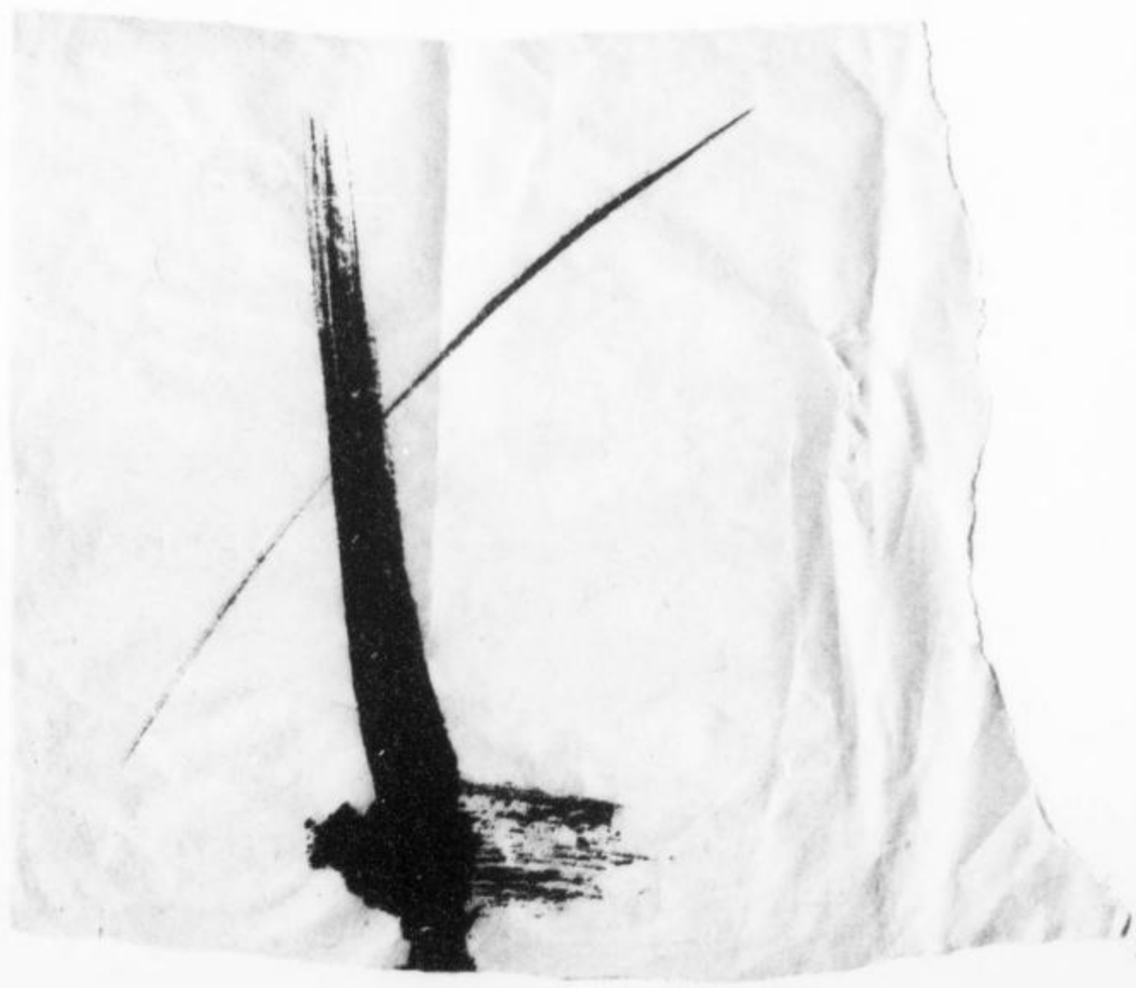


2b

▸ ***M. N.:*** I have always looked upon the number one as something extraordinary. Zero is the state where there is nothing. With the arrival of one, there is a birth. The distance between zero and one is not measurable. One is also different from other numbers in the sense that it is the only number we can call single; all the others (except for 0) are plural. In today's world there is too much esteem for quantity and a neglect of the individual.

■ **Could you explain the drawings to us?**

M. N.: In the first set there is nothing at first. Then a stroke appears, and suddenly the space becomes alive. Then a second stroke arrives. This time there is an encounter. The notion of distance is created and the two strokes communicate with each other.

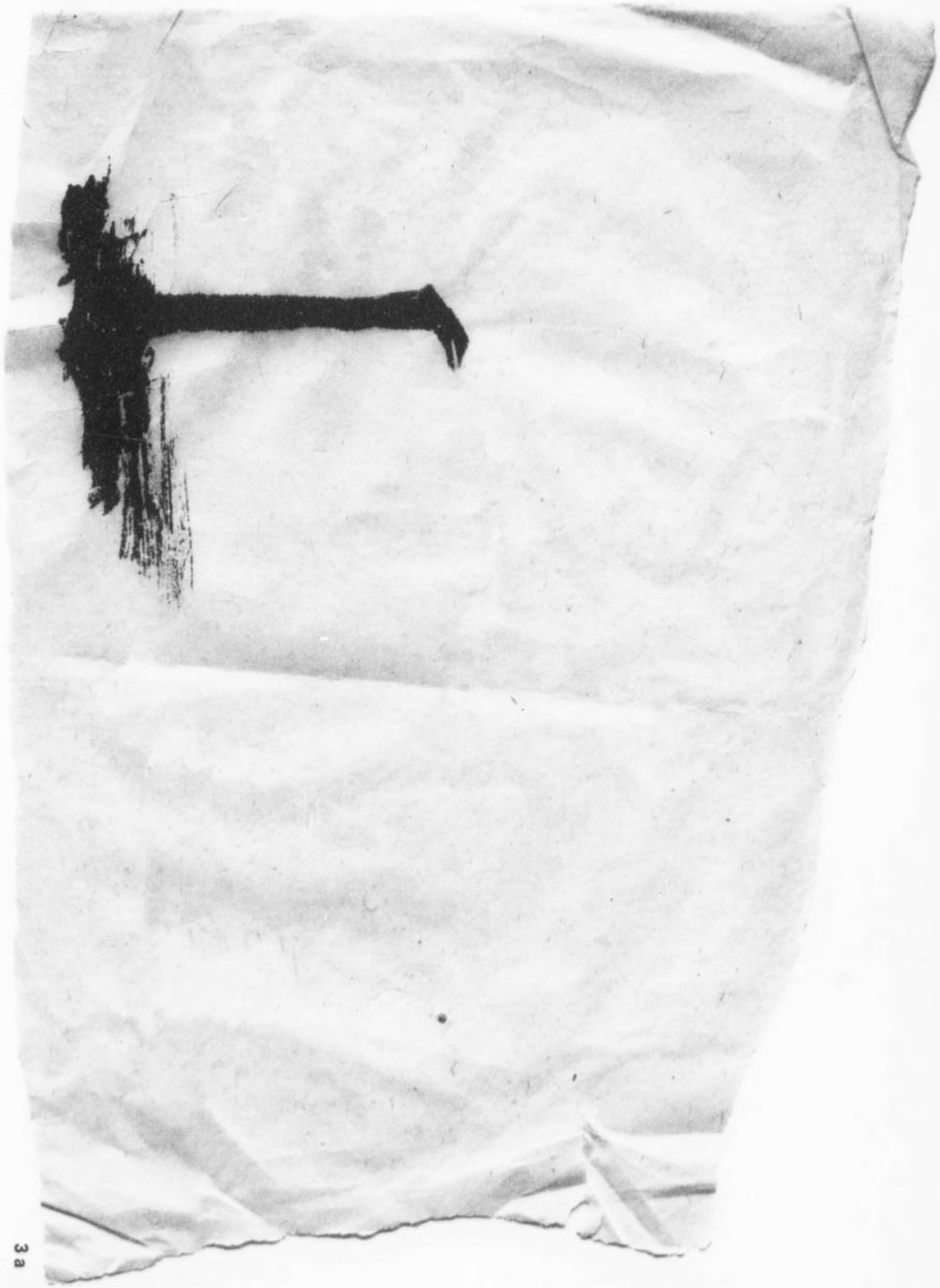
The process in the second set is similar, but the impression it gives is very different. The first stroke is powerful, and as the second stroke crosses the first, there is a sort of shock. The communication here is more violent; you feel a vibration in the space.

In the last set, another type of space is created. There is tranquillity. Even when the second one touches the first and new spaces are created here and there, the atmosphere remains calm.

I am not trying to say here what is right or wrong. I am just trying to show how space can be influenced by the movement of an individual. To me one plus one is not two, it is an encounter of one individual with another. ■

Interview by Miki Nozawa

Drawings © Shioun Michiko Nakasoto, Paris



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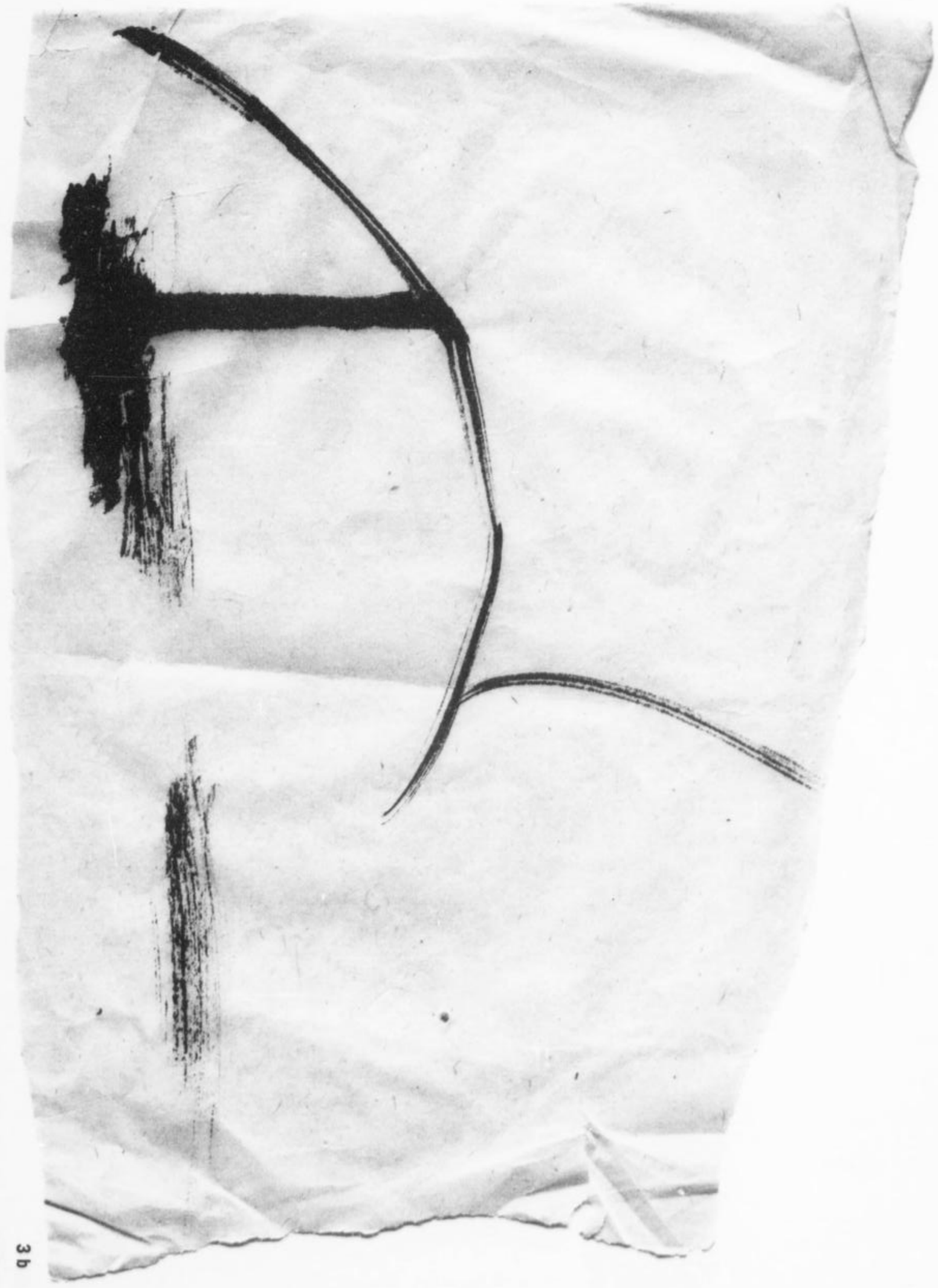


3 b

Waste not, want not

BY HISANORI ISOMURA

Beato Felice Studio © Larousse-Giraudon Archives, Paris

In today's consumer society traditional Japanese values based on moderation are more relevant than ever

The Japanese have never sought to tame nature; they have endeavoured to bring nature closer to them and to live in symbiosis with it. The Japanese garden, for example, which is a re-creation of nature, is entirely based on the principle of *shakkei* (literally, a "borrowing of landscape"), whereby a real feature of the landscape is introduced into an artificial setting, and a *bonsai* may be regarded as an artificial, miniaturized symbol standing for nature in its entirety.

In the formal gardens of Western countries, the artistic conception is human-centred. People cut and prune trees into symmetrical shapes and build fountains whose jets present a reverse image of waterfalls, and statues are erected and arranged for ornamental effect. Japanese gardens, on the other hand, seem at first sight merely to be a downscaled version of nature, and the signs of human handiwork are unobtrusive, if not invisible.

A 'floating' life in a 'floating' world

For the Japanese, nature and the world are synonymous. Over the centuries, they have accordingly developed a way of life based on moderation and respect for everyday objects. But Japan is today a consumer society, and the Japanese have become very materialistic.

Contrary to a common misconception, Japan was already an economic power in the sixteenth century, and its standard of living may well have been even higher then than it is now. At the time of the Ashikaga shogunate (the Muromachi period, 1337-1573), the country was very prosperous, as may be judged

"The tea ceremony is a sequence of ritual gestures and a moment of harmony encompassing the world in its entirety." Left, a photo of the tea ceremony taken in the late 19th century.

from the splendour of the temples of that period, a prime example being the *Kinkaku-ji*, or Golden Pavilion, in Kyoto. However the influence of Buddhism, Zen Buddhism in particular, produced a reaction against such ostentation and a "renaissance" of aesthetic and moral criteria, a return to a tradition that emphasized simplicity, sobriety and purity of form, as typified in architecture by the *shôin* style in sixteenth-century architecture.

This aesthetic is reflected in Japanese classical literature. The author of the *Heike monogatari* ("The Tale of the Heike", second half of the twelfth century), for example, considers all fortune to be fleeting and all prosperity to be doomed sooner or later to disappear. The combined influence of Buddhist culture and the hard living conditions caused by a rugged climate have led the Japanese to regard life on earth as a "floating" life, constantly changing and finally vanishing. The term *ukiyo* means both "floating world" and "world of privation".

For the Japanese, the ideal of beauty is to be found in communion with nature. The tea ceremony, an art that proceeds from the zen aesthetic, is not only a sequence of ritual gestures but a moment of harmony encompassing the world in its entirety. It was codified in the sixteenth century by Sen no Rikyû, who also created the *wabi sabi* aesthetic—beauty shorn of all ostentation that charms by its simplicity—underpinned by the Buddhist teaching that plenty cannot endure and is not to be found in immoderation. What should be respected is the transience of things.

A tradition of moderation

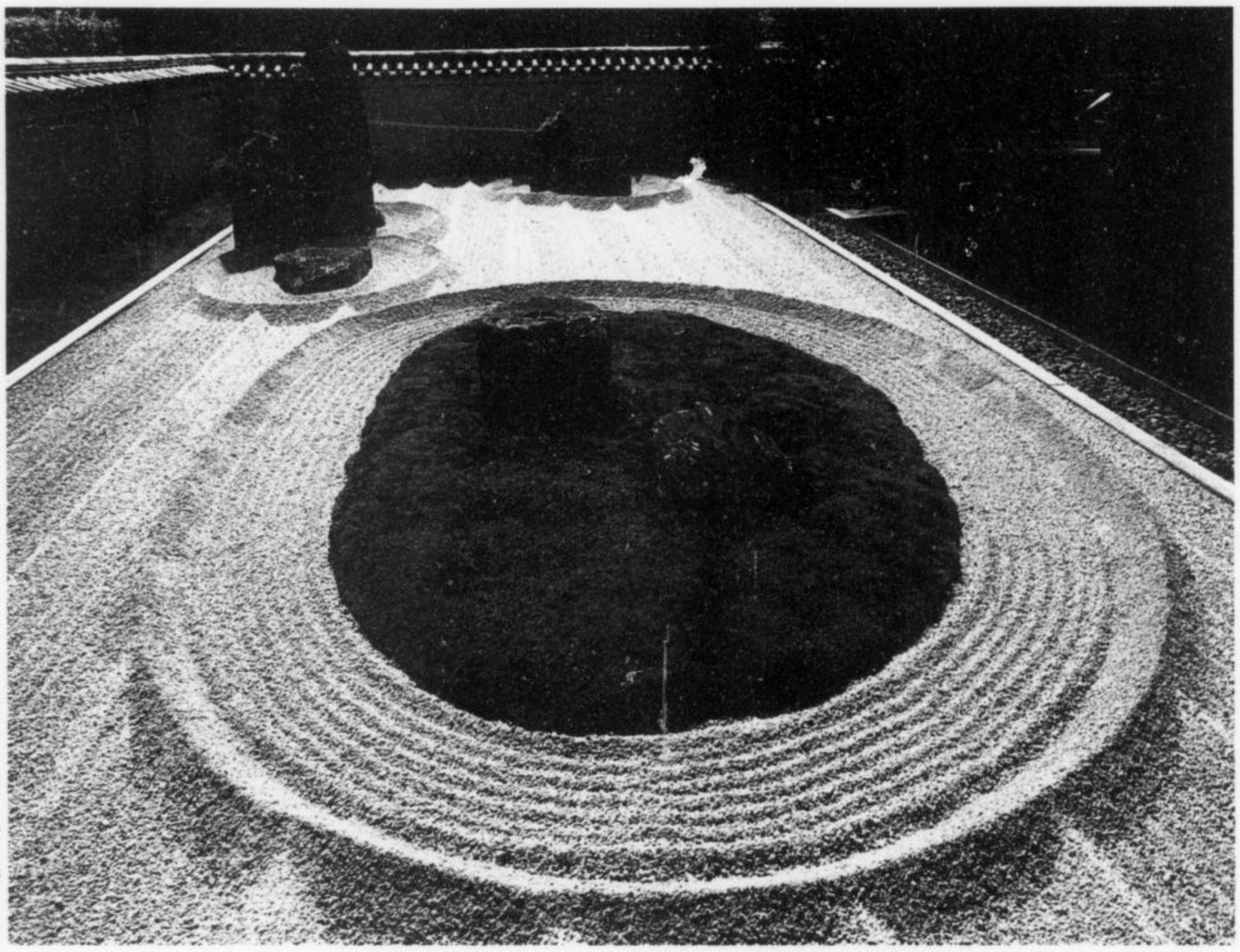
Respect for all things is thus a traditional attitude in Japan. There are some colloquial expressions, *mottainai* for instance, that express the chary national attitude to any kind of waste. Older people can remember saving water all their lives, though water is plentiful everywhere in Japan. There is a single bathtub for each household, and people use it in the evenings after washing outdoors. But habits are changing and Japanese girls who used to wash their hair in the morning (*asa-shan*) now shampoo it again in the evening (*yoru-shan*).

Grandparents also used to tell their grandchildren not to leave so much as a single grain of rice in their bowls, an attitude that was in fact prevalent in all countries before waste was urged upon us by the consumer society. The Japanese have an insulting term for someone who wastes things—*monogoroshi*, "killer of objects". Anyone to whom it is applied is a kind of social outcast since, according to an idea whose roots go back to animism, even inert objects have a soul.

On a more down-to-earth level, we learn from sixteenth- and seventeenth-century archives that the reason why there were so few ▸

"Moderation was prevalent before waste was urged upon us by the consumer society." Right, a car dump in Japan.

© UNEP/Still Pictures, London



© M. Troncy/Hoa Qui, Paris

"In Japan Zen Buddhism produced a return to a tradition that emphasized simplicity, sobriety and purity of form." Above, a zen garden in Kyoto (Japan).

▶ waste-bins in Japanese cities was that people then made a point of using every object as long as possible.

Changing times, changing ways

Since the 1950s, Japan has modelled itself on the United States, a land of plenty where to be frugal is a vice and to consume a virtue. This trend, which is affecting more and more countries, inevitably raises problems. If a country like China, for example, were to indulge in unrestrained mass consumption, the earth's resources would very likely soon run out.

Twenty years ago I bought a German car. It has so far done 280,000 km and I am still using it, to the derisive amusement of some of my friends, most of whom change cars every other year. The dynamism of the Japanese economy is fuelled by such behaviour patterns on the part of consumers. In fact, the law itself encourages people not to hang on too long to the same material goods. Motor vehicles, for example, have to undergo a thorough roadworthiness test after seven years, and an annual test thereafter. The test costs the equivalent of about $900, and it costs about $1,100 to send a vehicle to the scrapyard—an incentive on the part of the authorities to sell as soon as possible.

Since the earth's resources are limited, it is essential that our ways of life should change, that we find a new "global way of life". In a White Paper on the life of the nation, the Japanese Government has advocated a return to tradition, an idea summed up in the expression "progress in tradition". With modern technology it is possible to conserve energy and protect the environment while at the same time maintaining a growth rate conducive to the raising of living standards. We, the consumer countries, should therefore work together to find a middle way that encourages neither American-style waste nor withdrawal into the past. ■

"A *bonsai* may be regarded as a miniaturized symbol of nature. The traditional way of life in Japan, in communion with nature, was founded on moderation and respect for everyday objects." A dwarf tree raised in a pot (below), the *bonsai* typifies the Japanese ideal of the garden as a re-creation of nature.

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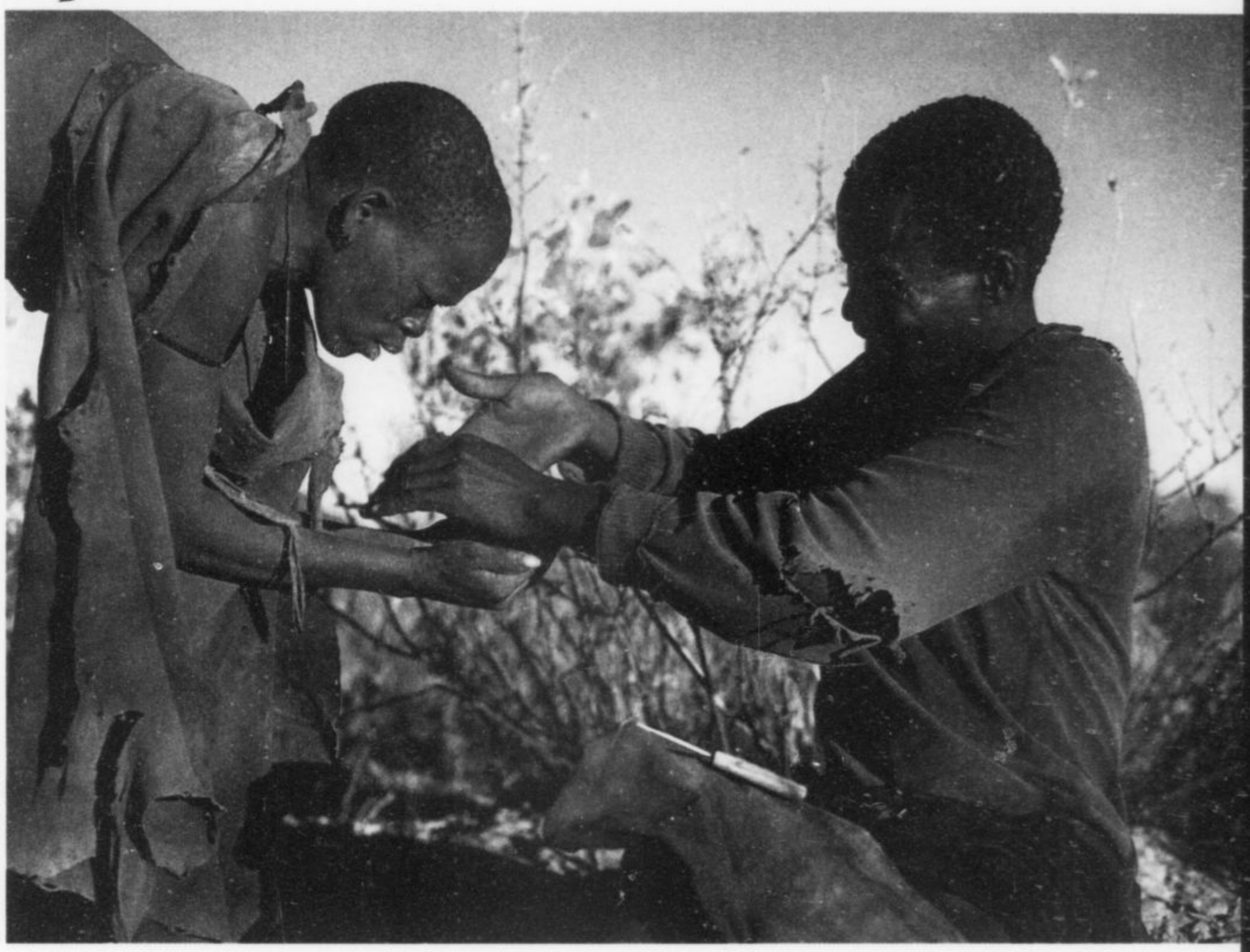
An economy of sharing

BY MARIE ROUÉ

There is no place for selfish individualism in nomadic hunter-gatherer societies



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Bushmen in the Kalahari Desert (Botswana).

There are two radically different ways for members of a society to satisfy all their needs: by producing a lot, as in Western societies, or by not wanting a lot, as in those the American anthropologist Marshall Sahlins has called "Zen" societies. The "Zen" way chosen by hunter-gatherer societies is to stop producing food as soon as they consider that the quantity in hand has reached a level sufficient for their needs.

It has been shown, and statistically confirmed, that, contrary to a widespread misconception, population groups who live by hunting, fishing and gathering do not live in utter privation, nor are they constantly in search of permanently inadequate food. On the contrary, they may be said to have created "the first affluent society", spending only a few hours a day on meeting their material needs and keeping the rest of their time free for recreational and social activities. It is only observers who are unaware of these people's cultural values who find their few plain possessions so inadequate. Nomads, for instance, set particular store by light, portable objects, but this does not make them poor. One observer has testified that "their extremely limited material possessions relieve them of all cares with regard to daily necessities and permit them to enjoy life."

Sharing and solidarity

However, not all hunter-gatherers live in an earthly paradise where they need only to stoop to pick fruit and vegetables and where game animals give themselves up voluntarily. There are some groups or families within these societies who can never manage, or can manage only at certain times, to meet all their needs, while any group is bound at times to include individuals who are too sick, too young or too old to take part in productive activities, and disaster can sometimes befall the harvest or the hunt. It is in such circumstances that the sharing of resources becomes especially important.

What is the point of sharing? Some ▸

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Inuits hunting for seal in Greenland.

observers claim that it fulfils the same function—that of risk limitation—in "traditional" societies as insurance policies do in Western societies. By sharing a surplus that in any case could not be consumed in the immediate future, individuals or families are ensuring that other members of the group will do the same for them when the time comes. Other observers, however, are not entirely satisfied with this materialist explanation, since it presupposes an egalitarian, turn-and-turn-about system, when in fact that is far from being the case, and it is rare for those who are never on the giving end to be excluded from the benefits of sharing. Why, in that case, do the ablest hunters who, as everyone knows, produce more than they can consume, continue to hunt large animals when nearly all the meat will be consumed by people other than their own kith and kin? For prestige and the attendant social advantages, to qualify as a husband, a son-in-law, a partner in some undertaking or simply an envied neighbour—these are some of the possible reasons.

Every summer the Cree Indians of Chisasibi (Quebec, Canada) gather on the site of their former village. Below, meals are prepared jointly and served to everyone present.

© Marie Roué, Paris

One good turn deserves another

Beyond these reasons of self-interest, however, underlying the good hunters' generosity is a whole outlook that is intolerant of selfish individualism. In the past, Western missionaries and travellers often misinterpreted attitudes quite unlike those that prevailed in the villages where they themselves grew up. Seeing how Eskimos and Bushmen feasted when food was abundant, so that sometimes there was nothing left over for lean times to come, they reproached them for their lack of foresight and their gluttony. But in fact feasting is another way of redistributing to the community as a whole the foodstuffs brought back by its more fortunate members, thus strengthening the social fabric.

There are also rules of sharing whereby "one good turn deserves another" throughout life, as with the Arviligjuarmiut Inuits when they share a seal they have killed as a team working together. Each member of the

team always receives the same part of the beast and indeed takes his name from it—"my shoulder", "my head", and so on.

Some of the peoples living in the Arctic and sub-Arctic regions believe that the animals caught by a hunter have given themselves to him, so it is not surprising, for example, that among the Cree Indians of Quebec the hunter's generosity to his companions in the hunt should match that of his quarry. If the favour was not returned, the cycle would be broken and the animals would not let themselves be caught. Similarly, when a feast is given everything must go, a custom that astonished those who first observed the Algonquins' way of life and is still maintained today. When the whole village—visitors included—is invited to a feast, guests will find a plastic bag by the side of their plates, an invitation to them to take away anything left over when they have eaten enough, to be shared with those who could not be present.

Many peoples—the Mbuti of the former Zaire, the Canadian Cree and Inuit, the Batek of Malaysia and the Nayaka of southern India, to name but a few—are ignorant of the Western dichotomy between nature and nurture. In many cases, they see their relationship with the natural world of animals, plants and places from which they receive gifts as a genuine child-parent relationship. They therefore regard sharing—nature giving to humans or humans giving to one another—as an essential part of their lives, expressing an outlook on the world that could be described, in Nurit Bird-David's words, as a "cosmic economy of sharing". ■

© Charles Lénars, Paris

A group of Danis, a people living in Baliem Valley, western New Guinea (Irian Jaya), prepare a meal. Their economy is based on farming, food-gathering in the forest, fishing and hunting.

A Bedouin encampment in Iraq.

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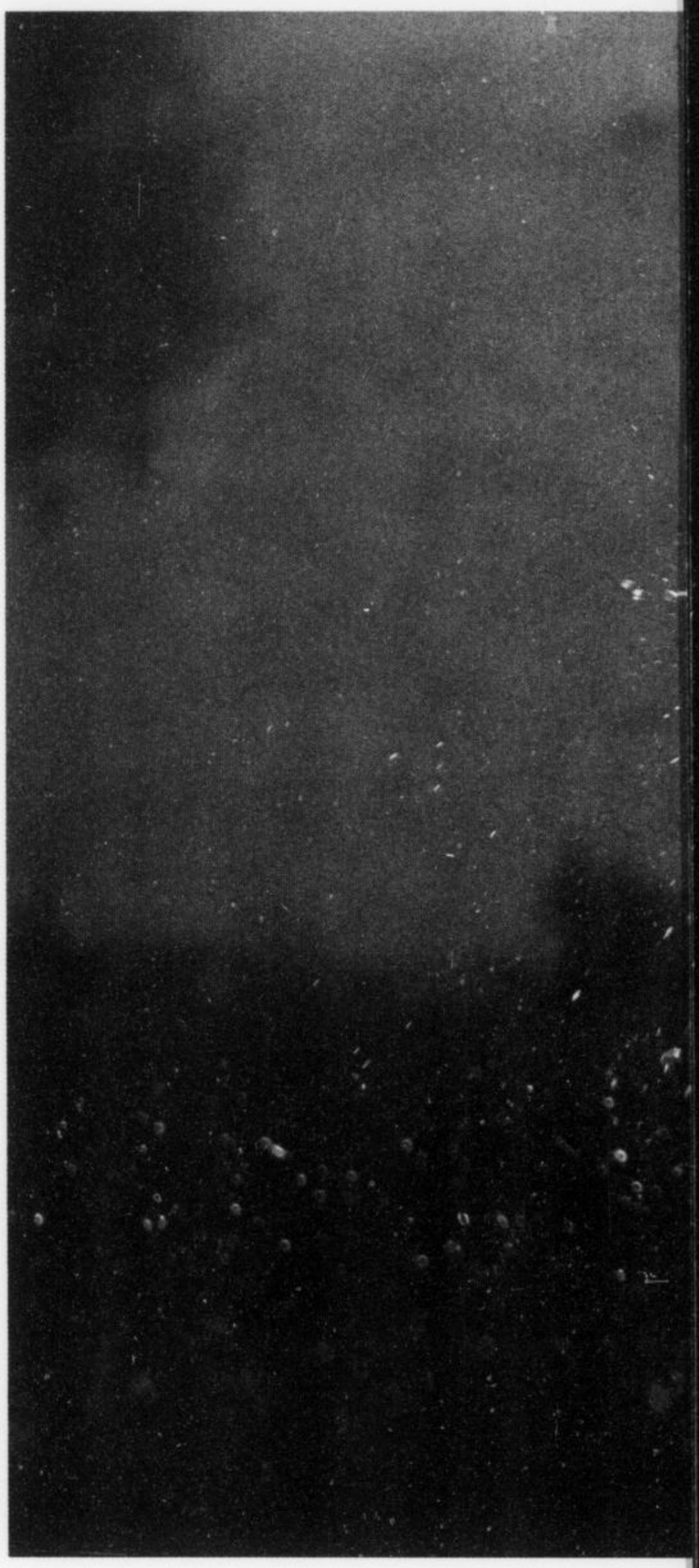
Making a little go a long way

BY BABACAR SALL

Needy African societies governed by an ethic of sparing, caring and sharing



In some parts of Africa frugality is a quality that is central to social and economic life, partly because poverty has become so taken for granted in recent years. The Wolof language has an expression for it: *doy lu*, which may be translated as self-sufficiency.

Society is built around the idea of potential scarcity, and sharing and solidarity are highly regarded. Seeking personal profit is frowned on. Building up your own stock of something means taking away from the group a resource which it could otherwise use. This has given rise to an ethic of parsimony and sharing.

Drinking, eating, spending and having a good time should be done on the basis of "keep nothing for yourself which could be useful to someone else", to quote a Wolof saying. Keeping a share of something for someone else is seen as a way to avoid excess.

Frugality permeates the daily life of Sahelian nomads such as the Peul even in a situation of abundance. Housing is spartan, light and made of easy-to-dismantle vegetable matter. The basic diet consists of dairy products. Above all, water is using very sparingly.

Another Wolof proverb—"tomorrow isn't today's guest, but we must put something aside for it"—shows how far saving, forced on people by an unpredictable food supply, is rooted in people's mentalities. Excessive consumption upsets the future sharing of a product. Most Senegalese believe God does not give things but entrusts them to a person's care. In return, people carefully look after what does not belong to them but which they are given to share.

Pupils at an open-air school in Senegal work in the shade of a tree.

© Giséle Wulfsohn/Panos Pictures, London

© Edward Parker/Still Pictures, London

In Mali, a Dogon farmer sprinkles his field with water during the dry season.

Such sharing, essential when there is perpetual scarcity, governs all social activities—work, income, joy and unhappiness. But this modern-day harmony only works because of its ties to a traditional solidarity.

A home-grown development project

Drought in the 1970s and the widespread poverty it brought helped to intensify this frugality in social and official relationships. Even development projects based themselves on low-cost methods of organization and approaches.

The Malian village of Sanankoroba, which is usually held up as an economic development success story, shows how a mixture of local organization and modern equipment can have good and lasting results.

The villagers launched a development project along their own lines in 1984 with the help of a twinning agreement with the Quebec town of St. Elizabeth. Instead of foreigners taking the decisions, the villagers used their own methods. Public meetings were held and the supreme tribal authority, the council of elders, was consulted. The council decided to extend the decision-making process to other age-groups, which served as links to different ▸

tribes and to associations of women, young people and professionals. The council then gave its opinion and decided how the project should be carried out.

The 24-member committee that was set up contained two new elements—it had five women on it and a local farmer as its chairman, despite the participation of people who had been trained in developed countries. This break with the classic pattern of development aid organization shows a determination to adapt to local physical conditions. Also, rather than taking the name given to the project by the Quebeckers—"Des mains pour demain," or "Hands for the Future"—the villagers chose a name closer to their way of thinking: *Benkadi*, or "good understanding". This name stressed that the project's goal is unity and social cohesion rather than transformation and planning, as conveyed by the Canadians' name.

So there were two ways of looking at the project. The Western approach was to shape the future by technical mastery of time and space, based on the belief that agricultural problems are essentially technical and can be solved by technical means. The African approach did not systematically take on board such a concept, since it regards the future as God's responsibility, so that the relationship between technical power and divine power requires careful handling.

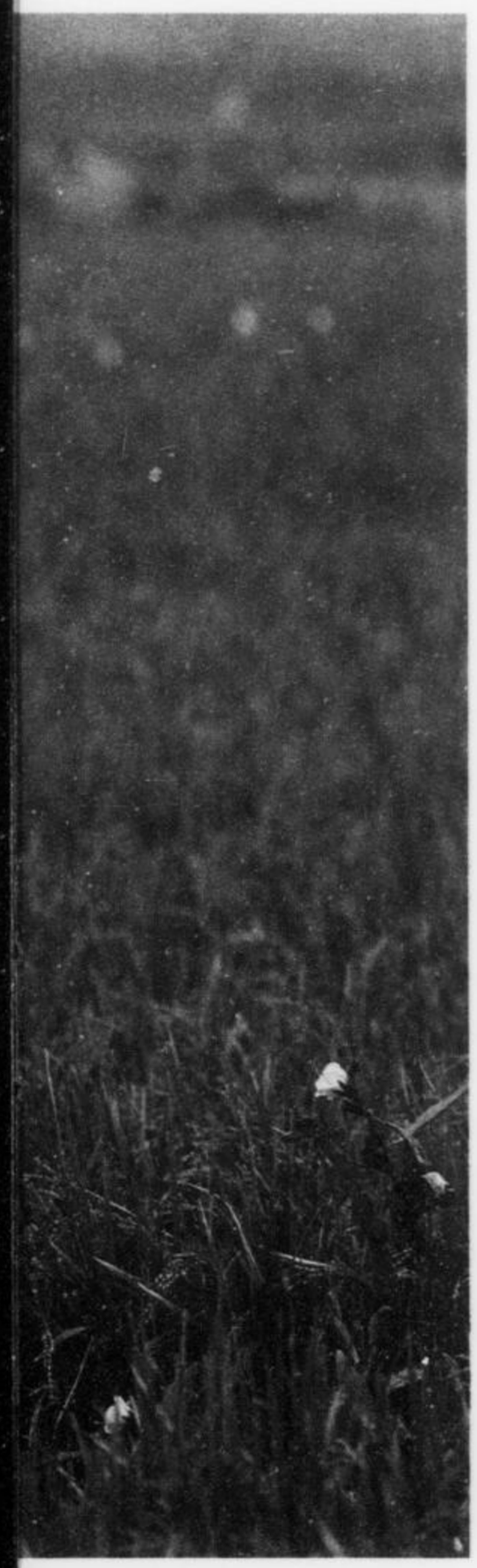
These different ways of thinking did not prevent fruitful co-operation. The main thing for the villagers of Sanankoroba was to express their own values in a productive manner with foreign help, and they managed to do that very well. The project led to better integration of several usually dependent social categories such as young people, women and lower classes. It also checked emigration to the capital, Bamako,

A technical adviser (right) and a villager collaborate on a development project in a rice-paddy on Morfil island (Senegal).

© Alain Pinoges/CIRIC, Paris

A meeting at a micro finance bank for the needy in a Gambian village.

© Sean Sprague/Panos Pictures, London



and the newly-irrigated fields and bountiful orchards even lured many back to the village.

Street schools

Another example, this time involving education, shows that consumption of knowledge, like consumption of anything else, requires that the product offered be carefully chosen and adapted to immediate needs.

In Senegal, non-attendance at school, which mostly affects country areas, has spread to the towns, with nearly 40 per cent of school-age children not attending. A system set up by the government to tackle the problem in primary schools in poor areas—a half-day of lessons daily, with some children coming in the morning and others in the afternoon—has proved inadequate.

The situation has given rise to the creation of "street schools", mostly in Dakar, with improvised classes in the street or in the yard of a house and plain wooden benches. The many children who attend these schools show how popular they are, especially as the fees are modest. Among the subjects taught are human rights, theatre, Arab language and environmental education. One basic difference from the state schools is that classes are usually in the children's mother tongue rather than French. Another is that the "street schools" meet the general demand for children to be taught not in a selective way but by giving them the basic knowledge to cope with the society they live in.

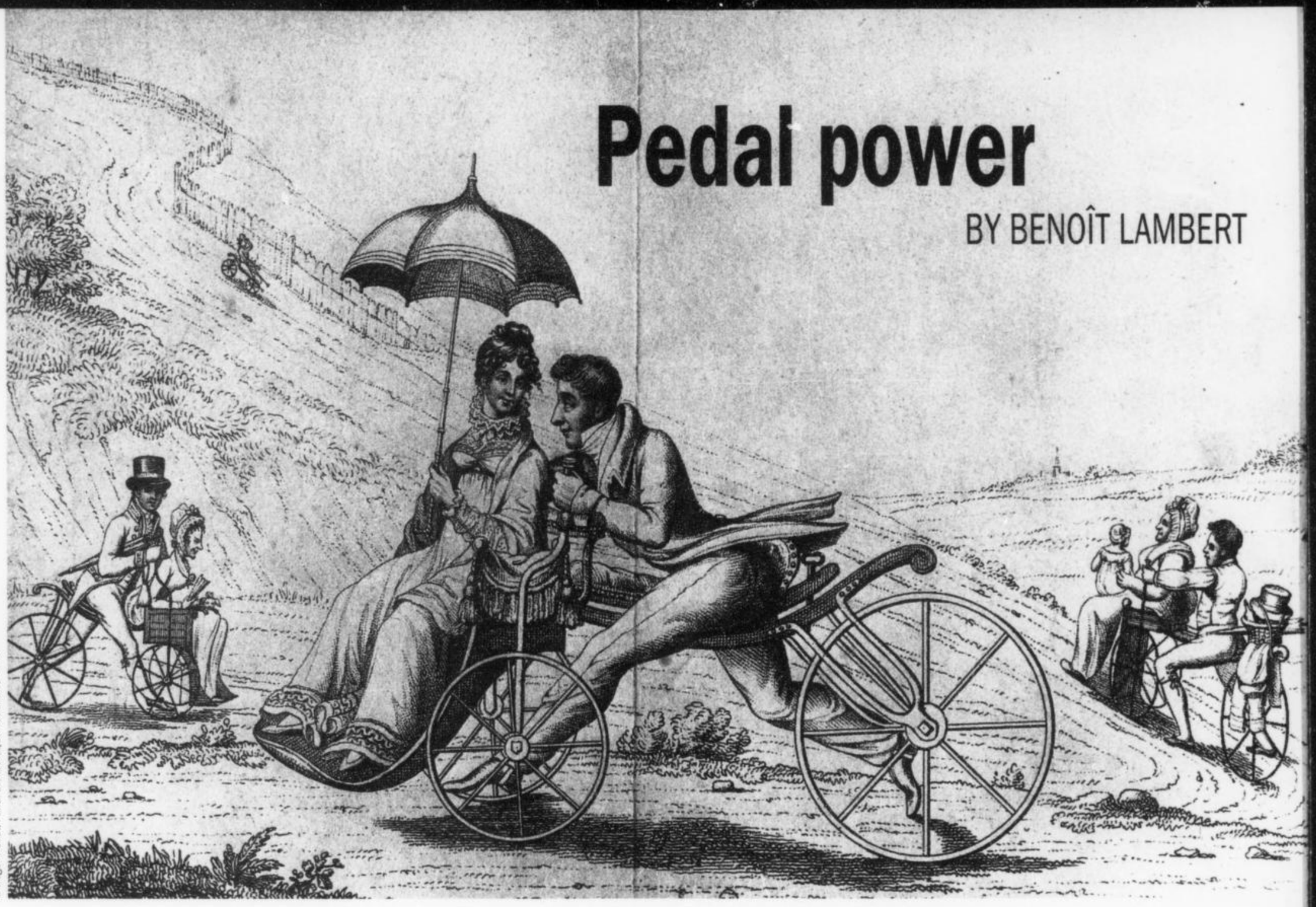
The same kind of priorities, springing from constant scarcity and structural inefficiency, apply in the economic and financial sphere. This has led to rival mail distribution networks and even banking services—mainly between African states and European countries with immigrant populations, like France. They are run on non-capitalist principles such as trust and personal and blood relationships. The "banks for the poor" are another example of adapting a consumer-oriented capitalist system to local conditions where modest consumption patterns are the rule.[1]

All these initiatives, carried out in conditions of scarcity, poverty and sometimes sufficiency but never abundance, show that even needy people can build community projects with what they have. In this way the link-up between frugality, economy and society leads to a new work ethic and gives an example to the world at a time of increasing breakdown of social ties and environmental degradation. Perhaps the ball is now in the rich countries' court.... ■

1 See the *UNESCO Courier*, January 1997, *Microfinance—helping the poor to help themselves.* Editor

Pedal power

BY BENOÎT LAMBERT



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A clean form of transport rides into town

Doubts are now being raised about the aura—almost of majesty—that surrounds motor vehicles, which, despite being too noisy and too big and guzzling too much energy, have long been regarded as symbols of national economic success and individual status. Since the 1992 Rio Conference and the cries of alarm that went up from the scientific community about threats to the stability of the earth's ecosystem, transport policies and especially policies in regard to the car have been under fire from all sides.

Bicycles have seized this opportunity to go on to the offensive. Fifty times lighter than cars, they have plenty going for them. They are non-polluting, nifty, silent and healthy. The number of cars in circulation worldwide will reach the billion mark in twenty-five years or even less, and this at a time of climate change. A certain measure of self-restraint in terms of individual mobility is thus an essential precaution to be taken to preserve the environment, and in fact more and more city-dwellers want to live in conditions of less pollution and stress. Cycles, especially when taken in conjunction with public transport, seem to provide an answer to this new-found aspiration to win back the streets and public places from colonization by the car.

In Amsterdam in March 1994, the European Union set up a network of car-free cities, to which sixty towns, including Aosta, Athens, Barcelona, Bremen, Granada, Groningen, Lisbon, Nantes, Reykjavik and Strasbourg, now belong. The main aims are to promote policies for sustainable development, encourage a gradual reduction in the use of private cars in towns, and serve as an international forum for the pooling of experience in this field.

The best results achieved so far have been in Copenhagen, where bicycles are regarded as a means of transport in the full sense of the term, and account for 33 per cent of journeys—a share equal to that of public transport and private motor vehicles. Although, admittedly, the local terrain lends itself to this mode of locomotion, it should be pointed out that the climate—the wind in particular—is a considerable disincentive, which nevertheless does nothing to discourage the townspeople. One of the reasons for the bike's success is the fact that there is an almost unbroken network of cycle lanes along the streets and the main thoroughfares. Since 1962, the policy has been to reduce the number of parking spaces for cars, often to make way for cycle lanes, with the result that motor traffic has gone down by 10 per cent since 1970.

Cycles are small machines that have had a big impact all over the world with people of all ages, male and female, rich and poor. In

Top, *The New Invented Sociable* or *The Lover and His Hobby*. An English engraving made in 1819.

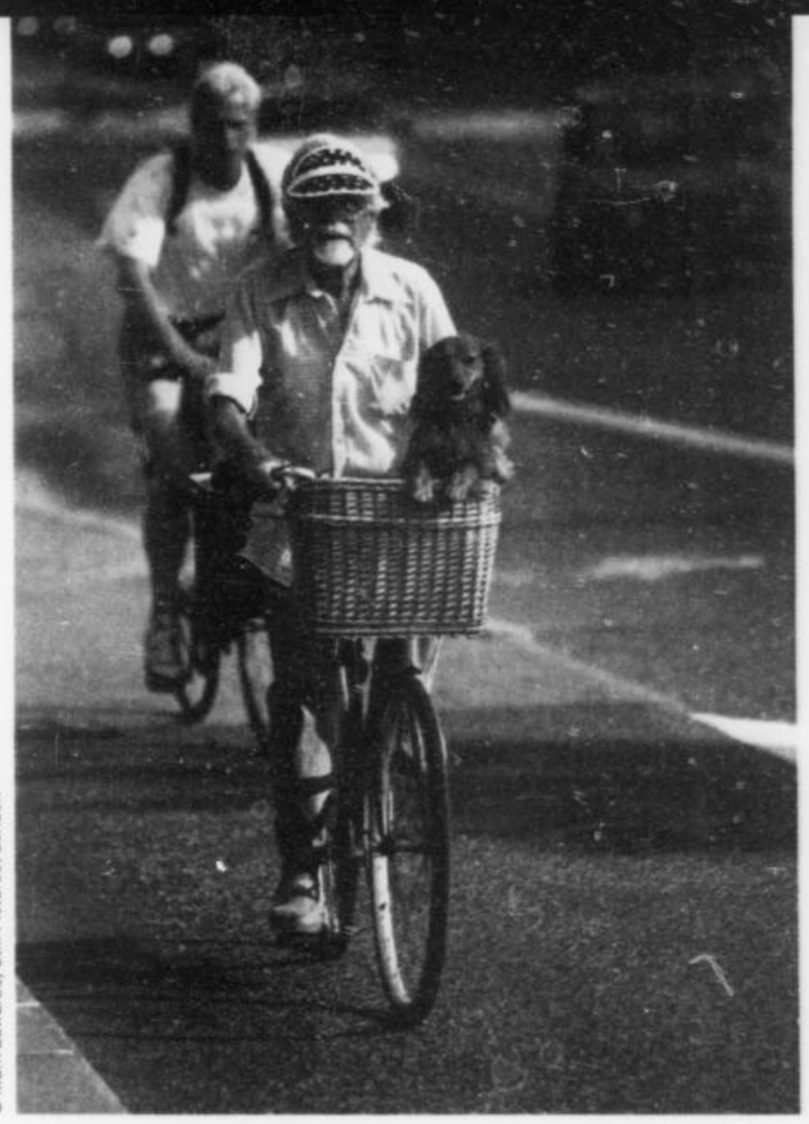
their quiet way they have helped to shape the modern world. In the Western countries, at the turn of this century workers were using them to get to work, and in this way, while themselves being an important industrial product, they contributed to the process of industrialization and to countries' economic prosperity.

A breath of fresh air

It was, moreover, thanks to the bicycle that a wind of freedom blew through people's patterns of behaviour. Weekends in the country began with the bicycle and, when youth hostels first appeared in the early 1930s, so did a new form of tourism, the cycling holiday. The New Woman on her bicycle became an emblem of emancipation, so potent that when undergraduates at Cambridge (U.K.) protested in 1897 against the admission of women they hanged a bicycling woman in effigy.

Pedal power is of great importance in the developing countries, enabling doctors to get around quickly in wartime in Nicaragua, allowing foodstuffs to be moved from one to another of the three markets in Riobamba, Ecuador, heavy goods to be transported on tricycles in Hanoi (Viet Nam), fresh bread to be distributed to 22,000 sales outlets by 800 tricycles in Bogotá (Colombia), and so on.

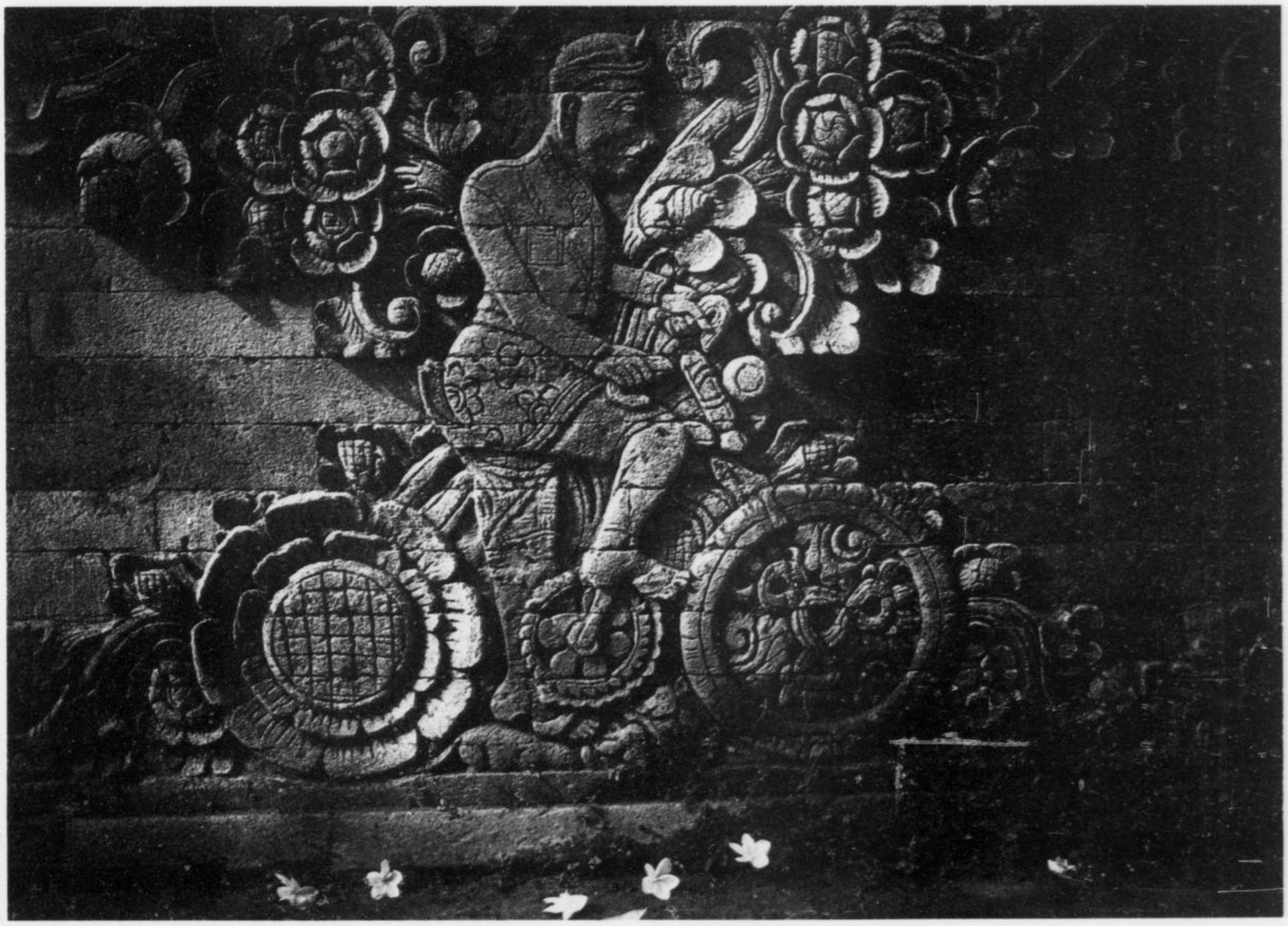
In Bogotá again, 100 km of streets are closed to motor traffic on Sundays for recreational use by cyclists, and hundreds of thousands of people take advantage of these *ciclovías* ▶



© Mark Edwards/Still Pictures, London

Cyclists in Copenhagen (Denmark).

Stone carving from Pura Maduwe Karang Temple (Bali) shows a temple official on a bicycle made of flowers.



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▸ *dominicales*. In China, where there are over 400 million cycles—nearly as many as there are cars in the world!—over 80 per cent of individual journeys are made this way.

Less calories per kilometre

For use in town, cycles compare very favourably in many respects with other means of transport.

Efficiency: the modern bike has the highest ratio of distance covered to energy input of any means of transport; at an average speed of 17 km an hour, a cyclist uses between three and four times less energy per kilometre than a pedestrian;

Resources: Marcia Lowe, of the Worldwatch Institute in Washington, has calculated that it takes a hundred times less raw material and energy to make a cycle than it does to make a car;

Health: a British Medical Association report published in 1992 pointed out that cycling is one of the simplest and most effective ways of keeping fit;

Cost: the cost of creating a cycle track in Britain is anything from 67 to 230 times less per mile than that of building a road, and even the most expensive bike will always be far more affordable than a car.

Cycling to a healthier world

Some commentators state categorically that sustainable development is not feasible without multimodal mobility combining public transport and two-wheelers. The irony of the situation is that just when the industrialized countries are starting to realize the virtues of the velocipede, some of the developing countries are trying to clear them off the streets, believing their replacement by motorized vehicles to be the outward and visible sign of modernization.

This begs the question as to what "modernity" means today. Shouldn't we be standing up for the idea of "cyclomodernity", using the bicycle to treat the planet's ills? It has been reckoned that by the year 2005, more than half the world's population will be living in towns and cities, and that by 2025 the number of city-dwellers will have doubled to five billion. At the same time, the worldwide proliferation of cars has resulted in the "automobile phenomenon" becoming almost coextensive with what Pierre Teilhard de Chardin called the "human phenomenon". In these circumstances, bikes come to symbolize a simple life attuned to the limitations of our biosphere and responding to the new demands from a growing number of city-dwellers for a less motorized environment. ■

The modern bike: a blend of hi-tech and simplicity

The Lightning P-38.

© Open Road, York, U. K.

Advanced technologies can now be integrated into bicycles in a way that can revolutionize their use. In 1994, a Japanese firm launched a bike with a small electric motor and two sensors which calculate the cyclist's effort and his or her speed. A built-in microcomputer then works out the extra power to be supplied to the pedal-wheel in order to maximize the rider's performance, e.g. when setting off, on a gradient or with a head wind—inconveniences that put many people off as soon as they are in the saddle.

The Dutch engineer Alan Lentz has developed another interesting innovation, a solar-powered trailer. The prototype won first prize in the 1993 Dutch Solar Bike Design Competition, which rewards the best suggestions for the combined use of solar power and the bicycle. A solar panel connected to a battery is built into the lid of the trailer and powers a small electric motor that drives the hub. The power generated is enough to propel the loaded trailer and can even push the bike. For campers, the battery can supply power for lights, radio, electric razor or any other electrical apparatus.

An impressive range of increasingly practical accessories is now available. Furthermore, the one-hour speed record held by the "horizontal" cycle—so called because the rider is in a lying position with his feet up in front of him and back arched—is 77 kilometres, as against 55 kilometres for a conventional machine. The horizontal cycle was invented at the beginning of the century and broke a number of speed records, but was banned from international competitions in 1934—because it was so efficient it enabled lower-rated riders to beat competitors riding conventional machines! Fortunately, since the 1970s associations for the promotion of human-powered vehicles in the United States and Europe have revived the horizontal bike. The back support given by the seat increases the power of propulsion and makes such bikes much more comfortable. **B.L.** ■

There are millions of cyclists in China. Below, a typical Beijing street scene.

© Andy Crump/Still Pictures, London

FACT FILE

Youth finds use for waste

© Nagoya International Centre, Nagoya

Bicycle spare parts sent from France to Burkina Faso.

In 1994 UNESCO's Division of Youth and Sports Activities conducted a survey on youth, recycling and development involving 120 youth organizations worldwide with members aged 25 or younger. Contrary to the widely held belief that young people who have grown up in a world bombarded with new products and advertising are trapped in a consumer culture, the survey showed that many young people in both industrialized and developing countries are taking part in a range of inventive recycling schemes whose objectives include waste reduction, environmental education, reconsideration of current development patterns, job creation for young people and the socially disadvantaged, and international co-operation. Their common denominator is that they all find a use for what is normally regarded as "waste".

The survey gave rise to a UNESCO programme, "Youth and Recycling for Sustainable Development", which held a World Forum in Nagoya (Japan) from 7 to 12 March 1996 attended by young people from 14 countries who swapped ideas and experiences. A number of practical initiatives were described, including a recycling programme by the Iumi Tugetha youth group ("You and Me Together" in pidgin) from Papua New Guinea who recover non-ferrous scrap metal and process it for export. Another project in Pakwach (Uganda) employs youngsters to collect scrap metal and use it to make hammers, chisels and other tools.

Other schemes are based on North-South co-operation. A group of young people in France are running a "Bicycles for Africa" programme, whereby discarded bicycles are collected and shipped to a partner group in Burkina Faso, where they are repaired and sold cheaply. The German Association for the Promotion of Training and Employment (GAB) collects and reconditions used hospital equipment, household appliances and tools and sends them to Africa and Eastern Europe. A joint Canadian-Filipino scheme called Race Against Waste organizes a competition to make toys from waste in order to raise awareness of environmental issues in hundreds of schools in Canada and the Philippines.

During a field trip, participants in the World Forum on Youth Recycling for Sustainable Development (1996, Nagoya, Japan) polish rusty tools in a recycling workshop run by young people in Asahi-cho, Aichi prefecture.

© Nagoya International Centre, Nagoya

The Nagoya Statement signed by participants at the Forum, "Make Haste Against Waste" (see page 35), recognizes the value of recycling initiatives taken by young people all over the world and identifies some of the obstacles they have encountered. It emphasizes that recycling is not an end in itself but a tool in the service of sustainable development, and calls on educators, NGOs, the media, artists, consumer groups, businesses, governments and United Nations agencies to support recycling in policy and practice.

Results of the Forum include the development of the international network of youth recycling groups, the promotion of their activities in the media and the extensive distribution of the Forum Report. A quarterly newsletter, *YARN* (Youth and Recycling Newsletter), was started to serve as a link between the informal group network. Many Forum participants have been communicating with each other and new groups have been joining the network. Many new partners have received containers filled with tools, sewing machines and bicycles.

Japan's Niwano Peace Foundation is awarding a grant for research designed to set the activities of young recyclers into an ethical and historical context. A CD-Rom is being produced to present some of the most innovative recycling schemes to schoolchildren and young people.

These international initiatives offer training and ▸

- employment opportunities to young people who are outside the social and economic mainstream and, in the name of sustainable development, present alternatives to the "throw-away" society. In so doing they are beneficial to young people in both the developing world and industrialized countries.

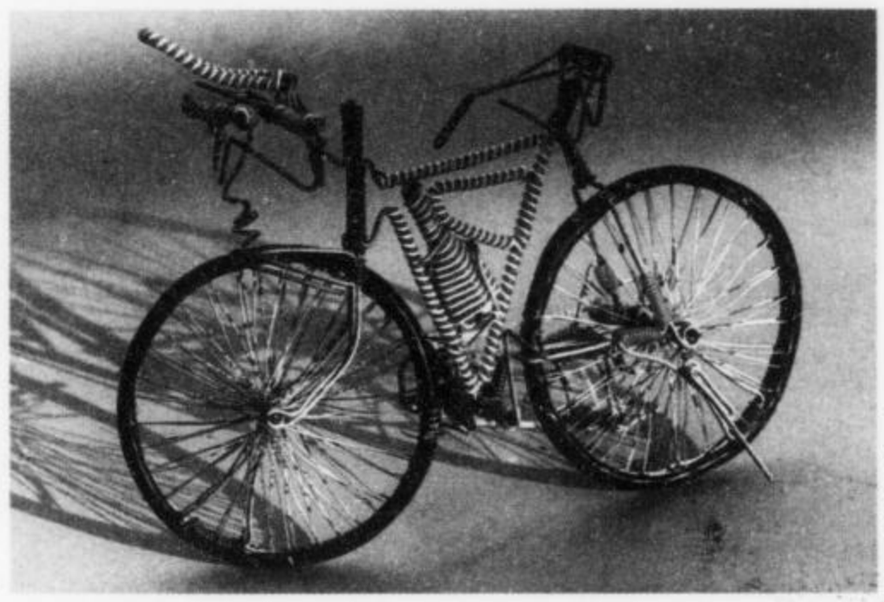
A second Forum to be held in Brazil sometime in 1998 will have the following agenda:

- ☛ evaluation and discussion of progress made since the first Forum;
- ☛ presentation of research findings into recycling's ethical implications, followed by a debate;
- ☛ extension of the youth-group network;
- ☛ involvement of other sectors (media, private enterprise) in the global recycling project;
- ☛ the raising of awareness about the need for sustainable development and redefinition of the North-South relationship.

The Forum will be organized in close co-operation with Brazilian institutions including the Ministry of the Environment, municipalities, NGOs and universities. Working groups will discuss specific themes and try to come up with concrete proposals. An exhibition of recycled items and materials will be open to the public, which will be invited to take part in presentations and discussions as at the Nagoya Forum.

Since the Forum will be taking place in Brazil, venue of the 1992 Earth Summit, the relationship of "Youth and Recycling for Sustainable Development" to Agenda 21 will certainly be one of the meeting's major themes. ■

Miki Nozawa



UNESCO-Nadège Brenet

UNESCO-Nadège Brenet

Toys made from recycled materials. Right, a miniature bicycle (Mozambique). Below, a tricycle rickshaw and a racing bike (Viet Nam).

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PUBLICATIONS DISTRIBUTED FREE OF CHARGE FROM THE ADDRESS AT LEFT:

- *Y.A.R.N. (Youth and Recycling Newsletter)* (also available in French)
- *Final Report of the First World Forum on Youth Recycling for Development, Nagoya, 1996*
- *Youth recycling - From Waste to Development*, Glyn Roberts, 1994

Project 2000+ and recycling

Since 1996, Project 2000+: Scientific and Technological Literacy for All, developed by UNESCO's Section for Science and Technology Education, has made recycling activities one of its major components. Experimental projects have been launched in a number of countries to find out how far this activity can help to develop scientific and technological knowledge and skills, as well as reinforcing environmental awareness among secondary school students.

These activities are being carried out by school science and technology clubs. They give students the opportunity to learn more about the environment, broaden their horizons and practise their scientific and technological knowledge and skills. The students also organize periodical school "recycled objects and materials fairs", where members of the local community can purchase recycled materials at very low prices.

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Recover, recycle, reuse, repair...

Collect plastics, metals, glass and paper to make use of the raw materials they contain.

Reuse or recycle old clothes. Unused medicines can be used in parts of the world with fewer resources.

Reject unnecessary packaging when shopping. Take cloth bags or baskets and reuse plastic bags.

Use second-hand and recycled products. Check the ecological quality of recycled products.

Whenever possible, use products that can be reloaded or refilled. Turn down discardable products.

Compost food remains. The result is valuable fertilizer for crops or gardens.

THE NAGOYA STATEMENT

adopted at the conclusion of the first World Forum on Youth Recycling for Development (1996)

(Excerpts)

Young people all over the world are taking initiatives to recycle at the local, national and international levels. In both developed and developing countries, and sometimes involving these countries in innovative partnerships, these youth initiatives:

- are genuinely useful, productive and of direct value to people and the environment;
- bring immediate economic returns by providing jobs and increasing income, particularly of young people; and by generating useful products and resources;
- mobilize young people with various abilities, educate and develop both technical and social skills that enhance conviviality and young people's integration into the community;
- promote partnerships in furtherance of international co-operation for social justice, equity and development;
- are drawn from or in some cases actually revive indigenous knowledge systems and orient young people towards sustainable practices and lifestyles. . . .

In order to be holistic and effective, recycling should be:

- economically viable, enhancing the economic standing of those involved and opening up the possibility of developing local/domestic production, thereby reducing imports.
- promoting social justice by addressing the disparities between developed and developing countries;
- engendering values of stewardship, community and responsible lifestyles;
- using safe and appropriate technology and encouraging innovation;
- showing gender, generational and cultural sensitivity by enhancing the participation of disadvantaged and marginalized groups in all stages of recycling. . . .

We, the participants in this Forum, commit ourselves to:

- strengthening our institutions and our recycling for sustainable development efforts with a view to achieving self-reliance;
- continuing to communicate and co-operate with each other; sharing technologies, models and information; and evolving new forms of collaboration involving developed and developing countries;
- evolving, committing to and propagating a Code of Ethics on recycling for sustainable development;
- Linking up with other sectors involved in research and development;
- doing all these things in the convivial spirit of "Iumi Tugetha" (the name in pidgin of a Papua New Guinea youth recycling scheme).

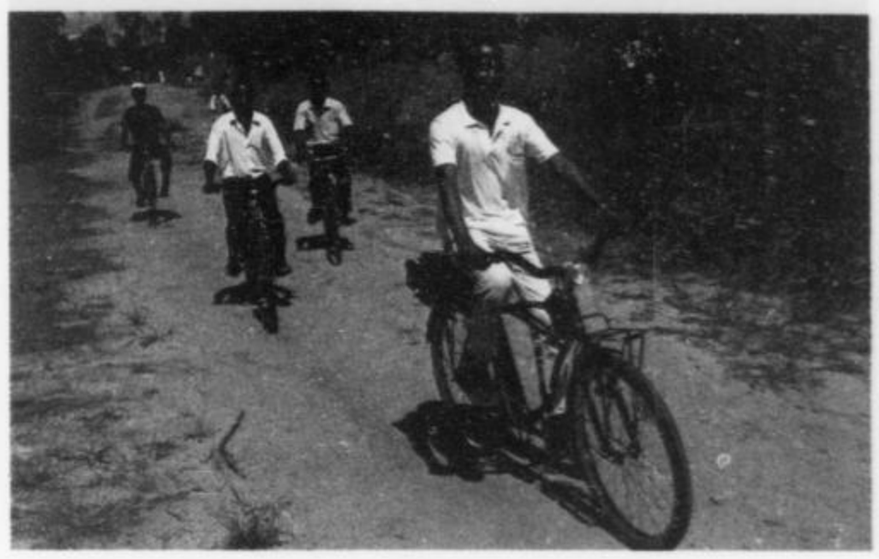
Abandoned bikes become 'feet of life'

In Japan many bicycles are abandoned, and local authorities have a hard time coping with the problem.

A project to donate these bicycles to other countries has been launched by MCCOBA (Municipal Co-ordinating Committee for Overseas Bicycle Assistance) and JOICFP (Japanese Organization for International Co-operation in Family Planning Inc.). The former, a consortium of 15 local authorities, supplies the bikes, while the latter is in charge of accepting them in recipient countries.

Once collected by MCCOBA, the bicycles are recycled and either sold to local residents or donated overseas. To date, 17,350 recycled bikes have been shipped free of charge to 41 countries via JOICFP and other projects, with transportation costs financed by local authorities.

JOICFP, which is engaged in village development activities in developing countries, is the project co-ordinator. Recycled bikes are given to villagers who have received training in family planning and health care. Bicycles are used as a means of communication and to transport food in remote areas. In Tanzania they are known as the "feet of life". An umbrella, a knapsack and boots are provided with each bicycle for the rainy season.



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In Mozambique farm and health workers get around on mountain bikes.

Bicycles for Africa

In Burkina Faso, the bicycle is nicknamed "the iron horse" and is an important means of transportation. In recent years, however, the price of a new bicycle has soared 500 per cent, putting it on a par with a rural family's annual income.

In France on the other hand bicycles are discarded by the thousands. In the Chambéry area alone—Chambéry is a sister city to Ouahigouya in Burkina Faso—1,000 bicycles are discarded every year. Young people in Chambéry have taken to collecting them from tips, retailers and police stations and sending them to Ouahigouya, where they are sold to local people for one-third of the price of a new bicycle.

In Burkina Faso the bicycles are dismantled, repaired and reassembled. This work is performed by persons with physical disabilities, unemployed persons and those on the margins of society. This programme has been useful in creating jobs and in fostering self-reliance. More than 3,000 bicycles have been collected over the past few years.

Future goals include improving the system for sorting bicycles in France, increasing the qualifications of African workers and obtaining cheaper spare parts.

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Water, energy, paper and glass

The average person in an industrialized country uses nearly twice as much water as someone in the developing world and nearly 10 times as much as someone in sub-Saharan Africa.

The average US or Canadian citizen uses about twice as much commercial energy as a resident of the United Kingdom, France or Germany, 10 times that of a Jordanian, 50 times that of a Guatemalan, 100 times that of a Vietnamese and 500 times that of a person living in Chad or Burkina Faso.

A person born in Finland uses over 27 times more printing and writing paper than the average person in the developing world.

The Nordic countries recycle two-thirds of their glass bottles and jars; North Americans recycle only about one-fourth of theirs.

commentary

Federico Mayor

Unesco/© Jacques...

Sharing—an ethic for the future

Let us cast our minds back to the world situation as it was in 1945. In that fateful year the North was in ruins and a sombre post-war mood prevailed. In the South, the struggle to achieve freedom from colonial domination was already under way, and in many cases a pre-war atmosphere reigned. The founders of UNESCO decided to confront this civilization of weapons with the weapons of civilization. They took inspiration from the radiantly simple idea of constructing peace in the minds of men through education, science, culture and the free flow of ideas—in short by communication.

In the prophetic words of the French poet Paul Valéry, they intended to build a "league of minds" as well as a League of Nations. At the same time they were determined that this international forum should serve the ethical goals which the world community set for itself: peace, the intellectual and moral solidarity of humanity and its common prosperity, freedom and justice.

As the intellectual institution of the United Nations system, UNESCO has been entrusted ever since its inception with an ethical mission. In this capacity, it must condemn wrongs, whatever their origin, wherever they occur and whatever form they take. UNESCO must have the courage to raise its voice and take action. It must not allow itself to tolerate the intolerable. To my mind this mission is today more timely and urgent than ever. UNESCO can and must make its presence felt in the world—by the force of ideas and above all by setting an example.

In less than three years' time, the world will enter the third millennium. It is now, when the twenty-first century is already knocking on UNESCO's door that we must think about the Organization's future shape. UNESCO will become increasingly forward-looking, because the Internet, the protection of the human genome, the increasing development of what Néstor García Canclini has called "hybrid cultures", the rapid emergence of "virtual cultures", lifelong education for adults and the revolution in the efficient use of environmental and energy resources are all 21st-century issues.

Development is now in jeopardy. We cannot close our eyes to poverty and indebtedness, exclusion and discrimination, non-stop degradation of the environment, exploitation, persecution and marginalization affecting whole populations—especially indigenous populations—the scandal of famine, illiteracy, intolerance, violence, war, social instability and even—after racial apartheid—the threat of social and urban apartheid, which is gradually undermining the foundations of democracy. On no account should we bequeath to posterity this grievous legacy.

Can we accept the fact that almost one-third of the population of the least developed countries die before the age of forty or that 20 per cent of the inhabitants of the planet share 1.1 per cent of world income? As Mr. James Wolfensohn, the President of the World Bank, recently pointed out, there can be no satisfactory economic development without parallel social development.

The answer to the challenge of poverty is contingent upon sharing, which is to my mind the mainspring of UNESCO's mission. The duty to share is but another form of the duty of solidarity, that "intellectual and moral solidarity" of humanity which is the only possible basis for a true and lasting peace.

We must share in time as well as in space. Our duty is to think of future generations. What do we want to pass on to our children? The prospect of a better future, or chronic poverty? Opportunities for all, or hardship

for a quarter or even a third of humanity? A living environment, or a planet without a future?

An ethical approach to the future must recognize the vital responsibility of today's generations towards future generations. It is now that we must lay the foundations of this ethic if we wish to build the peaceful conditions necessary for development in the next century. At a time when people all over the world are acting as though they had rights over the people of tomorrow we are starting to realize that we are compromising the full exercise of human rights by future generations. Hence the establishment of UNESCO's International Bioethics Committee. Hence the Declaration on the Protection of the Human Genome, the first universal standard-setting instrument in the field of living matter. Hence the Declaration on the Responsibility of the Present Generations towards Future Generations, which may, I believe, mark the beginning of a genuine worldwide awareness that could lead to practical initiatives.

Genetics clearly involves ethical issues; less obvious are the ethical dimensions of other aspects of the common heritage of humanity which we have the duty to preserve and pass on: the scientific heritage (i.e. knowledge), the natural heritage, the cultural heritage, and above all the axiological heritage, by which I mean the set of values, few in number, that in all cultures and in all ages illustrate the greatness of human beings and the force of humanism.

UNESCO must condemn wrongs, whatever their origin, wherever they occur and whatever form they take. It must have the courage to raise its voice and take action. It must not allow itself to tolerate the intolerable.

These values were slowly and painfully shaped, at a cost of struggle, suffering and sacrifice. They are part of a common past in which we are rooted and which enables us to see our way into the future. The great risk we run is to forget the past. Without memory ethics would be a disembodied force. Without the opportunity to compare it would be an arbitrary absolute. The values of human ethics are what has given us, and will give us, the strength to find unity in diversity.

A great deal can be done with slender means. According to the United Nations Development Programme's latest *World Development Report*, it would be enough for the developing countries to redirect 4 per cent of their military expenditure "in order to reduce adult illiteracy by half, ensure universal primary education, and give women an educational level equal to that of men." Mr. Wally N'Dow, Secretary-General of the World City Summit, Habitat II, has said that "The resources exist to provide every man, woman and child on this earth with safe water and sanitation and a roof over their heads" for less than $100 per person. It is through such investment in development and human security that arms will one day give way to the ballot box, and the force of reason will finally be victorious over the logic of force.

"If the people begin to act, the leaders will follow." I remember that sticker on the bumper of a car in Atlanta, which reminded me that by joining forces and by creating synergies we can change the world. That was the message of Martin Luther King, Mahatma Gandhi, Mother Teresa, and the founding fathers of the United Nations and UNESCO. It was the message of all my predecessors as Director-General of UNESCO, and I am sure it will also be that of my successor. To procrastinate is to betray the future by default.

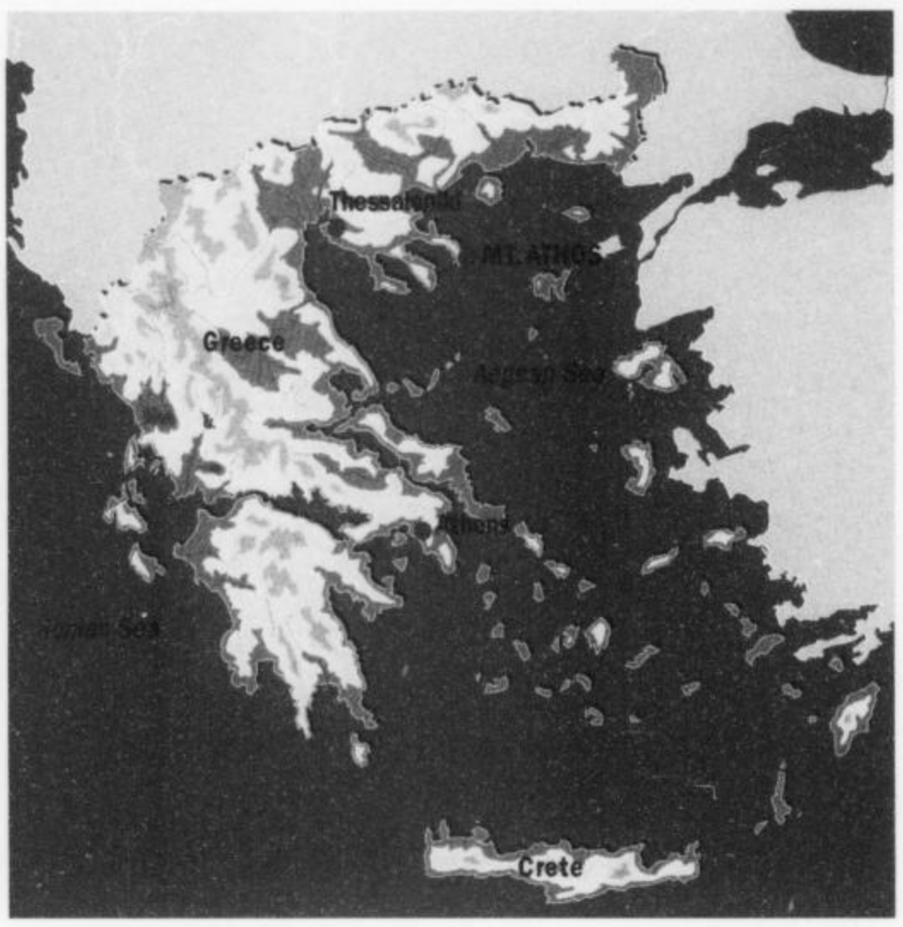
The participation of everyone and the responsibility of citizens are the securest foundations of a living future based on trust and the capacity of human beings to change, to build their own lives and to foster the spirit of continuing intellectual, cultural and biological development, the flowing river that is our substance. Now is the time for us to rephrase the Cartesian *cogito* for the citizen of the twenty-first century and say: "I am involved, therefore I am." If I am not involved, I may count as a statistic and my vote may be counted at election time, but I do not really count. This is why education is the only true democratic issue. As the International Commission on Education for the Twenty-First Century chaired by Mr. Jacques Delors has shown us, education does not only mean learning to know, learning to do or learning to be; it also means learning to live together, and hence to build tomorrow's society.

But above all we must dare to love. Today's biggest deficit is not an economic deficit, but a deficit of love. Education without love, without sharing, without solidarity with others is dust and ashes, a dead letter, empty talk and abstract words. As the African proverb has it: Love is the only thing that increases when it is shared. ■

The HOLY MOUNTAIN

by Plutarchos Theocharides

Ten centuries of uninterrupted creative effort shaped the architecture and art treasures of Mount Athos, which was placed on the World Heritage List in 1988.



Mount Athos, a rocky headland soaring 2,000 metres out of the Aegean Sea, is the most easterly of the three promontories of the Greek peninsula of Chalkidiki. The peninsula's rugged terrain and inhospitable coastline make settlement and communications on it extremely difficult. There is evidence that five towns existed there in Antiquity, but later, after the destruction and ravages of the early Middle Ages, the site appears to have attracted only anchorites and monks.

The origins of monastic life on Athos are lost in legend. The earliest historical sources attesting to the presence of a solid religious structure date from the ninth century. At that time the monks lived ascetic lives in isolated huts or *kellia* that were in many cases interconnected to form small monastic communities or *lavras*. There also seems to have been a rudimentary form of central organization, perhaps not unlike the monastic republic that developed later. But cenobitic monasteries (where the monks have everything in common) were only found outside the peninsula in the nearby inhabited regions.

The first cenobitic monastery on Athos (the Great Lavra) was founded by Athanasius the Athonite in 963 and was soon followed by others. By the middle of the eleventh century there were no less than 200 "monasteries", but numbers fluctuated considerably during the Byzantine period, and it was only under the Ottoman occupation that the numbers and types of monasteries on Mount Athos stabilized into more or less their present state. When Stavronikita Monastery was founded in the mid-sixteenth century, the number of monasteries was fixed at twenty, the present

The katholikon or main church (at right) of the Monastery of St. Panteleimon, which was rebuilt in the early 19th century.

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© Yves Gellie/Icône/Hoa Qui, Paris

Stavronikita, the smallest monastery on Mount Athos. Dedicated to St. Nicholas, it was rebuilt in the 16th century by Jeremy I, the Patriarch of Constantinople.

number. During the same period, the *kellia*, some of which replaced defunct monastic communities, gradually came under the control of the twenty monasteries. At the end of the seventeenth century, *sketes*—large communities dependent on the monasteries—were founded. The first of these foundations were "idiorrhythmic" (each monk living at his own rhythm); later ones were cenobitic.

Throughout their history, both under the Byzantine and Ottoman Empires, the large monasteries wielded exceptional economic power and enjoyed a privileged position. Their main sources of wealth were the exploitation of large estates (*metochia*), donations received from sovereigns and other prominent people and, in later times, from *zeteies* (long-term fund-raising trips) made by monks to the Orthodox countries where Athos always exercised great spiritual influence.

These spiritual and material factors had important repercussions on building activity on Mount Athos. Athonite architecture reflects architectural ambition and a diversity of influences—the latter being particularly apparent in the later (eighteenth-twentieth century) buildings. This marriage of different cultural and architectural inputs and the use of craftsmen from different regions gave rise to organic building complexes which served as prototypes for other Orthodox countries. After the fall of Constantinople in 1453 and the Ottoman dissolution of the Byzantine empire, Mount Athos, which was directly subject to the Patriarch of Constantinople, became one of the most important centres of artistic activity in the Orthodox world and perhaps its leading architectural centre.

In the late fourteenth century, Mount Athos entered a period of economic depression which lasted until the end of the fifteenth century and, for some monasteries, until the early sixteenth. The population, which in its two great periods of expansion (the eleventh and fourteenth centuries) is reckoned to have numbered about 6,000 and 4,000 monks respectively, probably fell to around 1,500. But as the fifteenth century came to a close, a new period of activity began with the renovation of buildings, the construction of imposing fortifications and the extension of the enclosures in some monasteries.

This activity came to an end at the beginning of the seventeenth century, when Mount Athos again gradually sank into decline, this time until the mid-eighteenth century. From the second half of the eighteenth century until the Greek War of Independence of 1821, there was a renaissance during which some of the idiorrhythmic monasteries converted to the cenobitic way of life. New construction work continued until the end of the nineteenth century, and the main architectural imprint on Mount Athos today is that of the eighteenth and nineteenth centuries. From 1850 on, Russian monks flocked to the peninsula, bringing with them an entirely different kind of architecture. At the turn of the century construction activity again slackened and was then interrupted by the First World War. Mount Athos fell back into a deep sleep from which it is only now emerging. ■ ▸

THE GARDEN OF THE VIRGIN

by Christine Quenon

According to legend, after the Resurrection, the Virgin Mary and St. John the Evangelist set sail for Cyprus to visit Lazarus. During the voyage they were caught in a violent storm and their ship was cast onto the eastern shore of Mount Athos.

Captivated by the beauty of the place, Mary prayed to her son and asked him to grant her sovereignty over the mountain. A heavenly voice replied, saying, "May this place be yours, may it be your garden and your paradise and a haven of peace for all those who seek salvation." This is why the monks called Mount Athos "The Garden of the Virgin", and the Greeks called it "Hagios Oros"—the "Holy Mountain".

In the Middle Ages a charter issued by the Byzantine emperor defined the rules of monastic life, which have changed little since then. The Virgin Mary is the only female presence. Only men are allowed to live on the Holy Mountain. Since the 1920s, Mount Athos has been a theocratic republic which enjoys a certain amount of autonomy within the Greek state. It is comprised of twenty monasteries. This number is immutable.

Silver incense casket in the shape of a 5-domed church (early 19th century). The figure of St. Stephen is depicted on the side.

A 16th-century icon from Stavronikita Monastery depicting the Annunciation. It was painted on wood by Theophanis, a master of the Cretan School.

Photos © Holy Community of Mount Athos/Organization for the Cultural Capital of Europe Thessaloniki 1997

CHURCHES, TREASURES AND LIBRARIES

The monasteries of Mount Athos are usually girdled by a fortified outer wall. Each one has a central church, or *katholikon*—in many cases a medieval Byzantine church painted red on the outside and surrounded by dependencies. The interior of the church, as at Vatopedi monastery, is decorated with frescoes, icons and mosaics. The monastery usually houses a treasury which the monks are reluctant to show visitors and which may contain reliquaries, icons and cult objects like the 14th-century jasper, silver gilt and enamel chalice, a masterpiece of Byzantine craftsmanship, preserved at Vatopedi Monastery, and Emperor Nicephorus II Phocas's vestments, which are kept in one of the peninsula's most beautiful monasteries, the Great Lavra. The monastic libraries are often rich in ancient manuscripts, some dating from the 4th century. The Great Lavra library, for example, contains more than 2,000 manuscripts and 5,000 volumes.

To fully appreciate the beauty of these monasteries, which blend harmoniously into the beautifully preserved landscape, it is best to approach them from the sea. Some, like the monasteries of St. Gregoriou, Vatopedi and St. Panteleimon, are located on the shore. Others, like Dionysiou, the Great Lavra, St. Paul and Simonopetra, perch on hilltops or rocky outcrops. With its jumble of roofs, towers, bell-towers and crenellations each monastery is a village. Small white buildings with wooden balconies cling to high, monumental walls.

A PLACE OF SANCTUARY

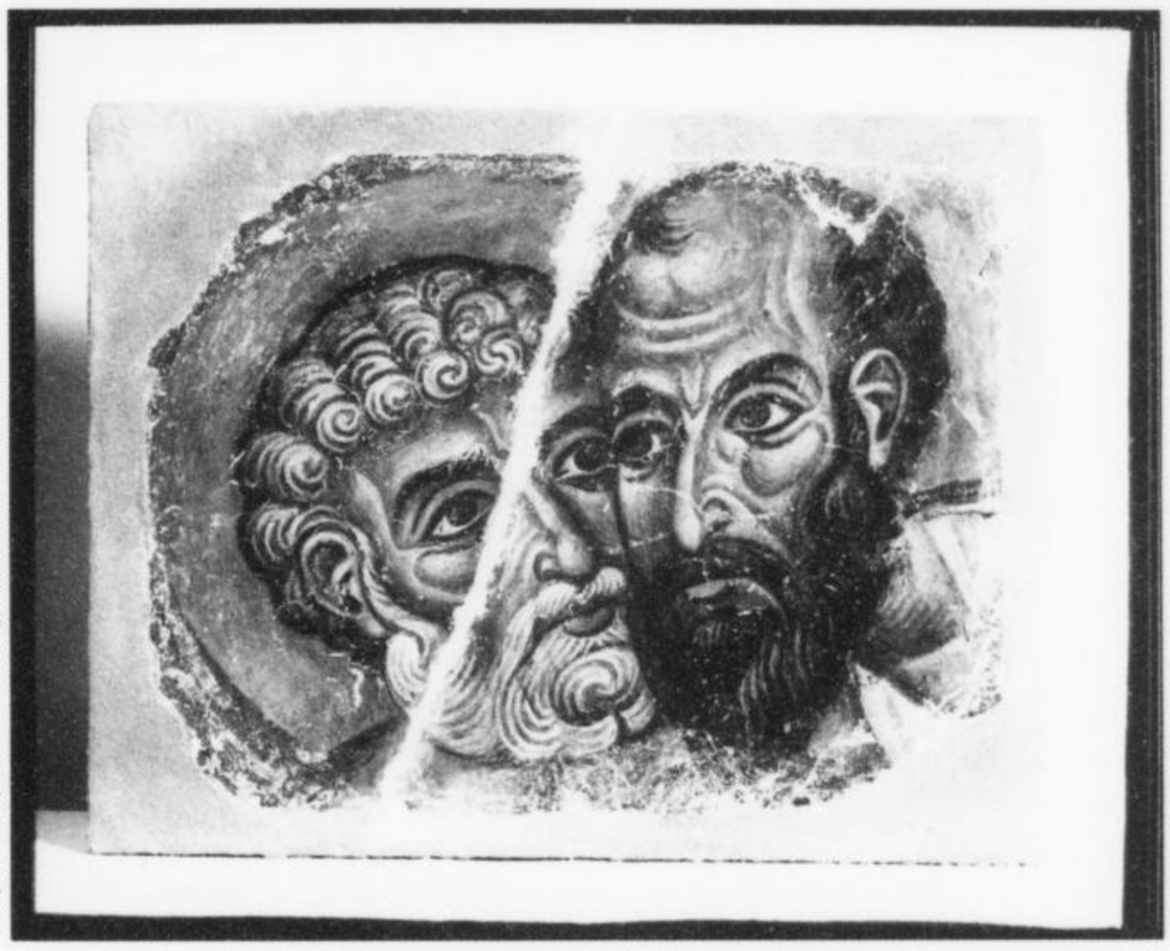
The monasteries are divided into two groups. In the cenobitic monasteries, governed by a single rule, everything is done in common: the monks live under the same roof, join in the same prayers throughout the day and night, share meals and work, and have no personal possessions. In what are known as "idiorrhythmic" monasteries each monk lives at his "own rhythm", owns his own cell, is not obliged to do any communal work and can freely use any income he may have. For the monks in these monasteries sharing is limited to living under the same roof and attending certain services together.

Other forms of religious life on Mount Athos fall outside these two major categories and include anchorites, hermits who live alone in secluded cells or in groups of two or three in remote houses with their own chapels, and gyrovagues—itinerant, mendicant monks.

The Athonite monks use the Julian calendar, and their day begins at sunset, not midnight. The bell that signals the start of a day of prayer and work is tolled at one o'clock in the morning.

The monks come from all over the Orthodox world. After a period of decadence, monastic life is today experiencing a renaissance and attracting new vocations. The Athonite school is also open to young men who do not wish to make a lifelong commitment to the monastic life. Many of the monasteries are undergoing major restoration work. The monks and anchorites who live in this sanctuary are keeping alive the contemplative tradition of the Orthodox Church. ■

THE TREASURES OF MOUNT ATHOS



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The embrace of the Apostles Peter and Paul, a symbol of ecumenical peace and the unity of the churches. Fragment of a late 12th-century fresco from Vatopedi Monastery.

Some of the masterpieces of Byzantine and post-Byzantine sacred art housed in the monasteries of Mount Athos were publicly displayed for the first time at a recent exhibition held in Thessaloniki (Greece). The exhibition, entitled *The Treasures of Mount Athos*, was organized jointly by the Holy Community of Mount Athos and the Organization for the Cultural Capital of Europe Thessaloniki 1997. It was held at Thessaloniki's Museum of Byzantine Culture from 21 June to 31 December 1997.

The exhibition, whose unifying theme was the spirituality that informs all aspects of life on Mount Athos, was divided into four sections: natural environment, architecture, daily life and worship, and—the centrepiece of the show—the treasures of the monastic heritage. On display was an exceptional collection of sacred art objects and other pieces (1,500 in all) selected from among those accumulated by the monastic community over the centuries in the fields of architecture, sculpture and, most especially, painting and the minor arts: icons (fixed and portable), mosaics, fragments of frescoes, silverwork, stone and wood carving, embroidery, ceramics, illuminated manuscripts, chrysobulls (edicts issued by the Byzantine emperors), archive documents and rare books. ■

A remarkable catalogue has been published in Greek and English: *Treasures of Mount Athos*, 671 pp., Thessaloniki, 1997. For further information, contact the Museum of Byzantine Culture, Thessaloniki (Greece). Tel: (30 31) 87 08 29 and 87 08 30 or 87 08 31. Fax: (30 31) 87 08 32.

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Portrait of Matthew the Evangelist and the opening page of his Gospel. They form part of a 13th-century illuminated manuscript of the four Gospels from Dionysiou Monastery.

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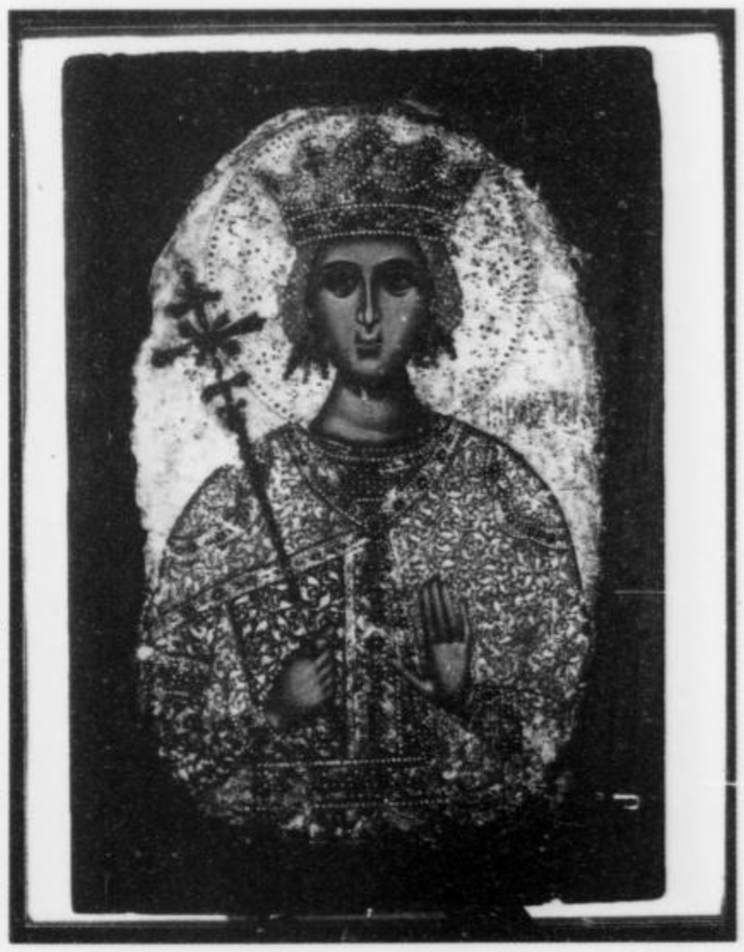
Left, the Nativity scene embroidered on a 17th-century red satin *pyle* from Simonopetra Monastery. The *pyle* is a veil hung in front of the central door of the iconostasis, a wooden screen separating the nave from the sanctuary in Eastern churches.



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Portrait of St. Catherine as a princess. A painting on wood (late 15th-early 16th c.) from Simonopetra Monastery.

GREENWATCH

Cities: residents to the rescue

BY FRANCE BEQUETTE

In the next ten years, the number of people living in cities will rise to around 3.3 billion. Tokyo already has a population of 27 million, São Paulo (Brazil) 16.4 million, and Bombay 15 million. World Bank forecasts show as much as 80 per cent of the developing countries' economic growth occurring in the cities and major conurbations.

There are both positive and negative aspects to these developments. As the Organization for Economic Co-operation and Development (OECD) points out in a recent study on *Innovative policies for sustainable urban development*, "At each stage in the history of urbanisation, environmental conditions in cities were improved dramatically. The process was often slow, but over time, many epidemic diseases have been controlled, the supply of clean water and the removal of wastes have become routine, the risks of fire have been contained, and standards of comfort and cleanliness have risen to unprecedented levels. Cities could not have become as large and as numerous as they are now if environmental conditions had remained unchanged."

In a curious way, the pollution that cities suffer is largely due to their wealth. The rich consume a great deal more energy, water, building materials and other goods than the poor, and thus produce much more waste. This is what is happening, for example, in the cities in south-east Asia and Latin America where rapid industrialization is taking place—only the rich enjoy the benefits of piped water and refuse collection.

A Tokyo street (Japan).

© Lars Bahl/2maj/Still Pictures, London

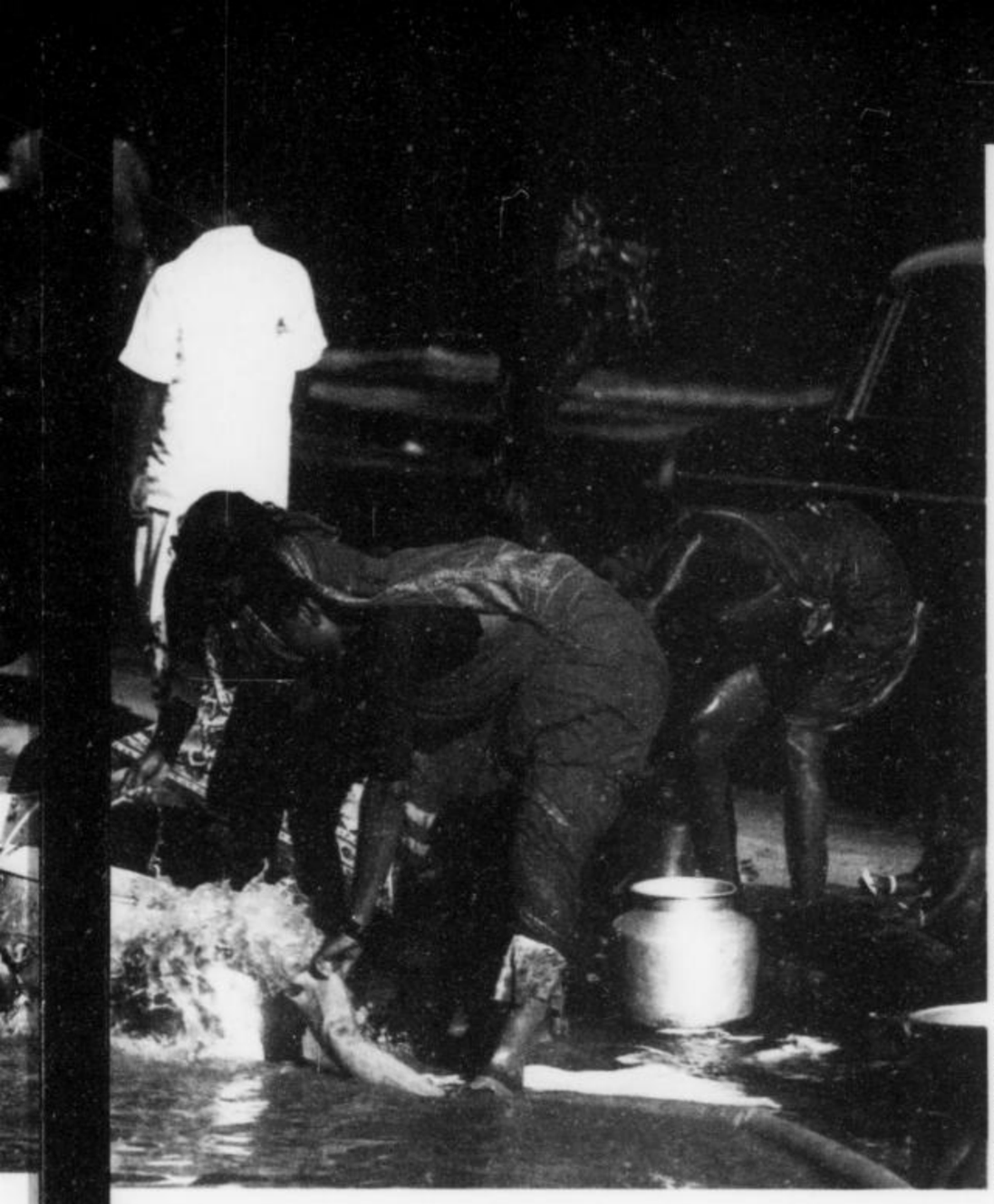
INCREASINGLY INSANITARY CONDITIONS

There is another, often tragic, aspect to this situation. The poorest of the poor are reduced to living in outer-edge shantytowns in extremely insanitary conditions and, lacking the resources to deal with the problem, the city as a whole has to endure congestion and air and water pollution. In Africa, where some towns and cities are expanding at a rate of over 7 per cent a year, municipal sanitation departments are no longer able to cope, and it is estimated that as many as 30 per cent of the population are without running water.

According to a remarkable report that was published recently[1], in many of the world's major cities runaway population growth, an epidemic of Aids and rising social tensions have been combined in the last few years with a steep drop in incomes. The population living on the outer edges of the cities continues to grow apace, hundreds of thousands of people are without running water and 15 per cent of them without sanitation of any sort.

Various voluntary bodies and non-governmental organizations have got together, often successfully, to work out solutions. In Abidjan, an original refuse-collection scheme has resulted in the seashore being cleared of rubbish and has also given regular employment to hundreds of people. Similar schemes have been initiated in Nairobi, Accra and Ndola (Zambia), where small-scale enterprises producing bricks have been set up, thus not only providing their

1. "The Urban Environment", appearing in *World Resources, A guide to the global environment, 1996-97*, a report compiled by the World Resources Institute, the United Nations Environment Programme, the United Nations Development Programme and the World Bank.



© Mark Edwards/Still Pictures, London

Washing in water from a broken water main, Bombay (India).

employees with an income but turning out a cheap, good-quality building material. Another example of "informal" employment cited in the same report concerns a refuse recycling project in Hanoi (Viet Nam), collecting and cleaning chicken bones which end up in Italian pharmacies as calcium supplements sold at high prices. The problem is, however, that these informal activities are much less well paid than "traditional" jobs. In the thirteen countries studied in the report, the average income in the parallel economy was well below the official poverty line.

WATER AND THE ENVIRONMENTAL CRISIS

One key problem concerns the availability of clean water. Some progress has been achieved as a result of the International Drinking Water Supply and Sanitation Decade, but in 1994 at least 220 million people still lacked a source of drinking water near their homes. In some cases, communities of 500 or more inhabitants are served by a single tap. In some towns, communal taps function for only a few hours a day, so that people cannot build up sufficient reserves of water for their personal needs if it takes too long to fetch or if the water has to be carried long distances.

As there are no proper sanitation measures, the disadvantaged members of the population have to drink dirty water, fish in polluted streams, and eat vegetables that have been grown by the side of refuse tips.

A further major problem arises from the threefold harmful impact of cities on the environment: urban development on agricultural land, the extraction and exhaustion of natural resources, and the dumping of refuse. The area covered by downtown São Paulo has grown in fifty years from 180 sq km to more than 900 sq km, while that of greater São Paulo now stands at an incredible 8,000 sq km! The productive areas—of land or water—from which food for the cities comes are gradually vanishing.

Growing pressure on coastal regions, where nearly a billion people now live, is doing serious damage to the marine environment. Development activities pose a threat to nearly half the world's coasts. In the diminutive island state of Singapore, for example, land is in such short supply that 6,000 hectares have been reclaimed from the sea, increasing the land area by 10 per cent in relation to what it was thirty years ago. A hundred and fifty years of reclamation along San Francisco Bay, the most densely built-up estuary in the United States, have reduced the area of the bay by a third.

RESIDENTS TAKE THINGS IN HAND

The report on the urban environment gives many examples of local schemes being launched, in both developed and developing countries, to keep these harmful effects in check.

The city of Graz (Austria) had an idea for reducing pollution from automobile and machine production, footwear manufacturing and brewing. A partnership was established with the Chemical Engineering Institute of the city's University of Technology, allowing the companies concerned to set up a project team to develop a cleaner production programme. In six years, not only was the volume of toxic and solid wastes reduced by 50 per cent, but production costs also fell, in some cases by 60 per cent.

Cajamarca (Peru) is one of the world's poorest cities, with a substantial infant mortality rate. The river Kilish, from which most of the population get their drinking water, is seriously polluted. The provincial authorities devolved some of their powers on to neighbourhood councils in the town and the surrounding countryside, and these bodies have given top priority to water delivery systems. They are also terracing the badly eroded slopes of the Andes, establishing seed banks, introducing health services and carrying out a programme of refuse collection and park improvement.

In Colombia's second largest city, Cali, 350,000 people were living in squalid shacks in the Aguablanca settlement. To help them make decent homes for themselves, the Carvajal Foundation built a warehouse selling good-quality building ▸

© David Dahmen/Panos Pictures, London

Women in Nairobi (Kenya) make bricks for their own use and for sale.

© Charles Lénars, Paris

A district of Singapore built on landfill.

▶ materials at wholesale prices, while the local school of architecture provides plans for simple, solid houses. The prices of foodstuffs have gone down since local grocery-store owners were given some training in management techniques, and infant mortality has been cut by two-thirds, thanks to the work of volunteers from the community, trained by the Foundation to educate families in nutrition and health care.

Towns originally offered people a place of refuge, of mutual help and culture. According to nineteenth-century town-planning theorists, they should supply all human needs. They were supposed to be the very stuff of civilization. That was not to be, and therefore whenever the authorities throw in their hands, dismayed by the scale of the problems and lacking the political will, money or resources to cope with them, personal initiatives are those most likely to succeed. ■

FURTHER READING

✔ *World resources, A guide to the global environment 1996-97, The urban environment*, Oxford University Press, 1996

✔ *Innovative policies for sustainable urban development, The ecological city*, OECD, 1996

initiatives

A model project in Brazil

The "Pirajá Memorial Project" is a scheme run by the *Centro de Educação Ambiental São Bartolomeu*, an environmental education centre in Salvador, Bahia State, Brazil. Its main aims are the affirmation of cultural identity and citizenship, and the protection of the environment. The Pirajá Metropolitan Park, created north-east of Salvador in 1978, is a 1,550-hectare forest reserve surrounded by overcrowded shantytowns where living conditions are appalling. Malnutrition and cholera are rife, infant mortality is high. Young people are exposed to violence, racism and drugs. Many drop out of school.

The park is of great historical and cultural importance, since it was at Pirajá that a famous battle for Brazil's independence took place. It was also here that the Jesuits built their first Indian village and that *quilombos* (places where runaway slaves gathered) were later set up. It is now under violent assault from several quarters: the extremely varied wildlife is being savagely hunted down, the plant life devastated and the rivers polluted by refuse, and forest fires are frequent. Black people's contribution to Brazilian history and culture—Salvador being the city with the largest black population outside of Africa—is being ignored, and places where the rites of *candomble*, the Afro-Brazilian religion, were celebrated are being destroyed. The park's living heritage seemed to be sinking into oblivion.

In 1991, the Project selected a number of local young people, aged 14 to 18, to work as guides, make contact with other young people and act as outreach agents in schools and in the community at large. Twenty-six teachers and 700 students were then recruited to replant and restore the *candomble* sites. A library was opened in 1995 and an environmental education programme was started, offering students a chance to take part in practical activities, including school vegetable gardens. Seeing the good work that was being done, UNESCO decided to make Pirajá Park an experimental zone of the Mata Atlantica Biosphere Reserve.

In 1996, the Project published a newspaper, put on a play, set up craft workshops for children, spread its activities to other schools, mobilized public opinion, and asked artists to act as "militants" in the cause of the park. So many initiatives have been launched that they cannot all be listed here. Work is now proceeding on the establishment of an open-air museum to draw attention to the region's history and culture, and the local population is being encouraged to learn more about nature and respect it. These activities form part of a wider socio-economic development strategy for the region, one of the poorest in the world. The United Nations Children's Fund (UNICEF) and several non-governmental organizations are already participating, and help of any kind for this fine project would be welcome. ■

Projeto Memorial Pirajá
Centro de Educação Ambiental São Bartolomeu
Praça 15 de novembro 17 - Terreiro de Jesus
Salvador/BA 40. 025-010 Brazil
Telephone and Fax: (55) 71 3219903

ROOTS, TUBERS AND GREEN BANANAS

Roots such as manioc and tubers such as potatoes, sweet potatoes and yams are, together with plantains, the staple foods of over 1.5 billion of the world's population. Some 650 million tons of these foods are produced a year, 70 per cent in the countries of the South. Their cultivation is an issue of such importance that a network for the promotion of tropical starch-producing plants (PROAMYL-CIO) has been set up, linking a hundred or so full-time researchers from CIRAD, France's International Centre for Co-operation in Agricultural Research for Development, INRA, the French National Institute for Agricultural Research, and ORSTOM, the French Institute of Scientific Research for Development in Co-operation. ■

PROAMYL-CIO, BP 5035,
34032 Montpellier Cedex 1. France
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E-mail: proamyl@cirad.fr

WORMS RID SOIL OF OIL

Australia's Murdoch University in Perth has carried out a study on the capacity of earthworms to decontaminate oil-polluted soils. Worms aerate the soil and enrich it with nutriments. When they ingest hydrocarbons their colour changes from pale pink to black, but they revert to their original colour when they have eaten organic wastes, their usual food. An oil company experimentally spread its sludge in a field which was later ploughed. Micro-organisms in the soil decomposed the light parts of the sludge. The worms dealt with the heavy parts. ■

RESTORING SPAIN'S FORESTS

In 1993, the Madrid Community Administration offered the Spanish branch of the World Wide Fund for Nature (WWF) the use of an experimental farm near the village of Alcalá de Henares. WWF-Spain joined forces with ONCE, Spain's National Organization for the Blind, which helps the sight-impaired and other disabled people. Twenty disabled people who have been given training in nursery techniques collect seeds in the wild and sow them. Last year, one million trees were raised and sales totalled nearly $162,000. Some of the trees go to restore damaged woodlands or protected areas such as the Delta del Ebro and Collsegola national parks on the Mediterranean coast. ■

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GETTING RID OF LEADED PETROL

The World Bank has this year published a report on the dangers of leaded petrol in Eastern and Central Europe. While some 18 countries, including Brazil, Thailand, Canada and the United States have now phased it out, the countries in this region have not done so. In Budapest (Hungary), for instance, 90 per cent of airborne lead comes from vehicle exhaust. Children are most at risk from the neurological damage and heart disease associated with lead exposure. The report recommends taxing leaded fuel more heavily than unleaded and helping refineries upgrade to new technology. The reduction in health care expenditure should more than cover the costs involved. ■

MYSTERY IN NIGER

Hydrologists from France's ORSTOM Institute recently came upon a puzzling phenomenon. Although rainfall has been declining since the 1960s in West Africa, the Sahel in particular, the underground water level near Niamey, capital of Niger, is rising, despite a serious twenty-year drought. The reason is that the plant cover has changed, the cultivated area around Niamey increasing from 12 to 63 per cent of the total. Rainwater runoff thus increases, as a result of several factors. The crust that forms on the surface of irrigated land is only slightly permeable, there are fewer obstacles (in the form of twigs and grasses) to runoff, and the activity of creatures—termites for instance—which used to be conducive to infiltration into the soil surface, has been reduced. Hence, rainwater gathers in low-lying spots and filters down underground, swelling the reserves of the aquifers. ■

CONTRABAND CFCS

It is ten years since the signing of the Montreal Protocol, whereby the use of "ozone-munching" chemicals was to be eliminated. The number of signatories has risen from the original 24 countries to 163. Some Western countries have already reduced the release of these substances by half, while other countries like China and Brazil are making efforts to follow suit. Unfortunately, it is reckoned that the illegal trade in one of the compounds—chlorofluorocarbons or CFCs—amounts to roughly 20,000 tonnes a year, and some unscrupulous producers even advertise their wares on the Internet. The ozone layer may have to wait until 2050 to heal itself. ■

PESTICIDES DUMPED IN AFRICA

More than 20,000 tonnes of deteriorated pesticides are currently stocked in Africa, amounting to a fifth of the total stored in developing countries. This estimate by the Food and Agriculture Organization of the United Nations (FAO) is alarming. More than 70 tonnes have been recorded in Benin alone. These highly dangerous products are largely intended for agriculture, but they are also found in aerosol form in markets and shops, displayed beside foodstuffs. It would cost from $80 to $100 million to get rid of them. ■

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Listening

Toto la Momposina

BY ISABELLE LEYMARIE

A Colombian singer with a tremendous voice, Toto la Momposina (Sonia Bazanta) is an internationally known exponent of the rich musical tradition of her country's Atlantic seaboard.

Toto la Momposina is a singer and dancer who releases seismic forces on stage. "The maelstrom of brass and drums and the colourful costumes made me think of back home," said a young South African dancer after one of Toto's concerts. " There's the same enthusiasm and energy that you find in Zulu music."

Toto's band features a trumpet, a *bombardino* (a precursor of the oboe family), a guitar and a double bass as well as folk instruments such as the *tiple* (a small twelve-string guitar) and a *gaïta* (a bamboo or cactus-wood Amerindian flute). She also has a percussion section that weaves complex rhythms with various kinds of drums, including the deep-toned *bombo*, bongos, claves, maracas, *guache* (seed-filled tubes that are shaken) and *marímbulas* (drums containing small strips of metal). "Drums make you react in an instinctive and spontaneous way," she explains, "and the music I perform is basically percussive."

Five-hundred-year-old music

Toto belongs to the fourth generation of a family of musicians (her father is a drummer, her mother a singer and dancer). She was born in Talaigua, a village on Mompos Island (whence her nickname), in the northern reaches of Colombia's Magdalena River. An intensely musical area, this lush, tropical region was originally inhabited by Indians and then during the colonial period became a haven for Maroons (fugitive slaves), who built fortified communities known as *palenques*.

The best known *palenque*, located near Cartagena, was founded in 1608 under the leadership of the African-born King Benkos. It still exists, and ancient Angolan customs are practised there. Maroons and Indians often intermarried, producing offspring who prized their freedom and originality. Musically speaking, Colombia's Atlantic coast is part of the Caribbean world, and over the years has produced a host of intense musical genres that have emerged from a blend of the African, Amerindian and Spanish cultures.

As a child, Toto learned the *chandé*, the *mapalé*, the *fandango*, the *currulao*, the *porro*, the *puya*, the *merengue* and the *cumbia*, all of which are secular or sacred musical forms. She also learned the art of the *cantadoras*, female singers who improvise *coplas* (verse couplets). She took part in fiestas, wakes and ceremonies in neighbouring villages, listened to the rhythmic songs of itinerant salesmen and was taught by many musicians, including the wonderful *cantadora* Ramona Ruiz, who visited the family home.

She made up her mind to devote the rest of her life to upholding her region's musical traditions. "You could describe our music as an enterprise that began 500 years ago," she explains, "a process that has developed and changed but perpetuates the village traditions from which it has emerged. What we want to do is inject our own energy into it, develop it to the full and help to strengthen our national musical identity. We want to help our country's music express the culture of all our people." The baton of tradition has already been taken up by her son and daughters, who play in her band, not to mention her granddaughter, Maria del Mar, who moves happily around the stage during some of their concerts.

Toto La Mompasina and her group.

© Josh Pulman/Label Bleu, Amiens

Humanist and mystic

Toto began her professional career in 1968. With her own band she has made several European and Latin American tours. After a stay in Paris where she studied the history of dance at the Sorbonne, sometimes sang in train stations and on street corners and cut two records: *Toto La Momposina* (Auvidisc) and *Colombia, Music from the Atlantic Coast* (Aspic), she returned to Colombia. "I was falling prey to ethno-musicologists and needed to recharge my batteries." She then studied the *bolero* in Cuba and incorporated the *son*, the *guaracha*, the *rumba* and other Cuban beats popular in Colombia into her repertoire and travelled all over the world.

She dislikes the term folklore which, she feels, designates ossified forms of expression, and prefers to talk of traditional music or, making a punning reference to "folklore", *conflor* ("with a flower") music. With its roots in the soil and in tune with the cosmic order, her country's music possesses inexhaustible vitality. "At home," she says, "the rural people have always composed music based on nature, and when music comes from the land, its language knows no frontiers. When I listen to drummers from Senegal or the Congo, I can hear affinities with Cuban, Brazilian and Colombian drummers."

"Upholding my cultural heritage internationally is a mission for me," she says, "but the road is not easy. There can't be any stars in this field. I have a spiritual idea of my art." ■

DISCOGRAPHY

La Candela Viva (Real World, 1992)
Carmelina (Indigo, 1997)

Luis Sepúlveda

Novelist in exile

© Sophie Bassouls/Sygma, Paris

Internationally-known Chilean novelist Luis Sepúlveda is a defender of freedom and of the environment who has experienced prison and exile. Here he talks about a career in which political commitment and a passion for writing are intertwined. Interview by Bernard Magnier

■ **What sort of a childhood did you have?**

Luis Sepúlveda: I was lucky enough to have a normal childhood in a family which was imbued with the spirit of curiosity and which gave me the urge and the opportunity to travel. From the age of fourteen onwards, I used to spend my holidays backpacking around Chile—which is 5,000 km from north to south—and the neighbouring countries, Peru, Bolivia, Argentina and Uruguay.

■ **What about your studies?**

L.S.: After secondary school in Santiago, I studied theatre production at the National University. In 1969, I was given a five-year scholarship to continue my drama studies at Moscow University, but it was withdrawn after five months on account of "misconduct"—I had made friends with some dissidents, who in my opinion were producing the best art in the Soviet Union. I had to go back to Chile.

■ **How did you become a writer?**

L.S.: Through reading, especially the great authors of adventure stories like Jules Verne, Jack London and Robert Louis Stevenson. We read a lot at home. My grandfather, who was a Spanish anarchist, loved books and had a small library. I think the urge to write came from reading Francisco Coloana, a Chilean writer.

■ **What was your first book?**

L.S.: It came out in 1966, a collection of very bad juvenile poetry I shall never have republished. I went on writing because I had acquired a taste for it, but without believing myself to be a writer. Then one day a friend put together a dozen of my stories into a book, *Cronicas de Pedro Nadie*, and sent it to Cuba, where it won the Casa de las Americas Prize in 1969. Later it was published in Colombia and Argentina, and I started to be known throughout Latin America. I'd become a writer through force of circumstance! I was also writing for the theatre and the radio, which I think is excellent training for a writer because of the need to meet deadlines.

■ **You had a political role at the same time...**

L.S.: While writing I was also politically active, first as a leader of the student movement and then in the Salvador Allende administration, especially in the department of cultural affairs. I acted as a mediator between the government and big business, and I also worked for the department of cultural affairs. I was in charge of a series of cheap editions of classics of world literature for the general public.

■ **Then came the 1973 putsch...**

L.S.: I was jailed for two-and-a-half years. I obtained a conditional release through the efforts of the German branch of Amnesty International but was then kept under house arrest. I managed to escape and went underground for nearly a year. With the help of a friend who was head of the Alliance Française in Valparaiso I was able to find work. We set up a drama group that became the first cultural focus of resistance, but I was rearrested and given a life sentence for treason and subversion, finally reduced to twenty-eight years, thanks to my defence lawyer.

■ **This time you were well and truly jailed...**

L.S.: No, in fact the German section of Amnesty International intervened again on my behalf and my prison sentence was commuted to eight years' ▶

exile, so in 1977 I left the prison for the airport to fly to Sweden, where I was to teach Spanish literature. At the first stopover, Buenos Aires, I managed to make my getaway.

■ **That was the start of a long exile...**

L.S.: Yes, I went first to Uruguay but many of my friends there, as in Argentina, which was then a dictatorship, were dead or in prison, so I went on to Brazil, to São Paulo, but had to leave there for Paraguay, where I couldn't stay because of the regime. I went from there to Bolivia and then to Peru, finally taking up residence in Ecuador after a great friend of mine, the novelist and poet Jorge Enrique Adoum, had invited me to attend a meeting of Latin American writers there. In Quito I was director of the Alliance Française theatre and founded a theatrical company and then I took part in a UNESCO expedition to assess the impact of colonization on the Shuar Indians.

■ **Was that important for you?**

L.S.: Enormously important. I shared the life of the Shuars for seven months. It was a decisive experience that changed my whole outlook. I suddenly realized what it really meant to be Latin American, to belong to a multicultural, multilingual continent—over ninety languages, not counting Spanish and Portuguese—with its own conceptions of time and history, its own rites. I realized that the Marxism-Leninism I had grown up with was not a recipe that could be applied to a continent whose population is mainly rural and stands in a close relationship of dependence and protectiveness with nature. I worked in contact with the Indian organizations and I drew up the first literacy teaching plan for the Ibambura peasants' federation, in the Andes.

■ **Then you went on again to another country...**

L.S.: Yes, but I went on writing short stories the whole time and I had plans for longer works. In 1979, I joined the Simon Bolívar international brigade, which was fighting in Nicaragua. Immediately after the victory of the revolution, I started working as a journalist writing on international affairs, but the following year I decided to leave Nicaragua and go to Europe.

■ **You decided to live in Germany. Why was that?**

L.S.: I chose Hamburg as my base because I had learned German in prison out of admiration for German literature, especially the romantics, Novalis and Hölderlin, without whom it is impossible to understand modern literature and Latin American literature in particular.

I also have a strong emotional rapport with Hamburg: it has links with Valparaiso that go back to the heroic days of sail. In addition, Hamburg is the place with the greatest concentration of media in Europe, so I had the opportunity to work for the press and write for television. I did a great deal of journalism, which gave me the opportunity to travel widely and spend much time in Latin America and in Africa.

It was in Hamburg in 1982 that I first came into contact with Greenpeace. I joined in their struggle for the environment. For five years, until 1987, I was a crewman on one of their ships. Later I acted as co-ordinator between various branches of Greenpeace.

■ **What about your writing in the meantime?**

L.S.: I never stopped. My first novel, *Un viejo que leía novelas de amor*, (*The Old Man Who Read Love Stories*) came out in 1989, followed by a second, *El mundo del fin del mundo*. They have been translated into many languages. I also kept on writing for the theatre.

■ **Has living in Europe changed your attitude to Latin America? Do you feel farther away from it now or closer to it?**

L.S.: I feel much more Latin American than if I were living in Latin America. But I don't think it necessary to come to Europe to write Latin American literature. I can write anywhere in the world. Distance, I must admit, does have the advantage of offering a panoramic overview of the continent and the reality of life there. The challenge in these circumstances is to keep yourself well enough informed to be able to understand the changes taking place and the reasons for those changes, which I do by going back every year—I have an excellent information network back home in the shape of my friends who live there. That being said, my time in Europe is a rather happy and persistent accident that has undeniably left its mark on me. I have soaked up European culture.

■ **Do these different influences come together in some way?**

L.S.: Literature is one and indivisible. Different writers take different paths but they all lead to the same destination. Literature is a great brotherhood. Jean-Marie Gustave Le Clézio, for example, is a European writer but he spends much of his time in Mexico and his outlook is such that we regard him more as a Latin American writer!

Latin America is a continent of contradictions and wide differences but in some respects it is

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Patagonia Express. Published in English as *Full Circle: A South American journey*, Lonely Planet Publications, Melbourne, 1996 (translated by Chris Andrews)

also an extension of Europe, a continent of emigrants. Borges referred to us Latin Americans of the southern cone of the continent as Europeans born in exile. Our way of life follows European models. We are republics, we fought for our independence and our political sovereignty, patterned on that of the French revolution, and the great poetical founder-figures of our modern literature, such as Ruben Dario or Vicente Huidobro, are undeniably mature Europeans.

■ **What makes you write?**

L.S.: I write simply because I like writing. I don't want to do anything else. I gave up journalism to devote myself entirely to literature. This may sound like the answer of someone who has been privileged or an anarchist, but I do what I like doing and I make my living doing it.

I don't regard writing as a gift from the gods, a privilege accorded to a certain caste. It's just a job! It makes me laugh when I hear of authors who claim to suffer a lot when writing. If they suffer so much, why do they write—they don't have to be masochists.

■ **Do you rework your books a lot?**

L.S.: Yes, a lot. I'm a very disciplined worker and I don't regard them as finished unless I have been over them at least ten times from beginning to end.

■ **Your books are short. Is that a deliberate choice? Is there a rhythm you feel obliged to follow?**

L.S.: Length and style depend on the story you want to tell. I have cut fifty pages out of some of my novels because they got in the way, they interrupted the flow I wanted to give them.

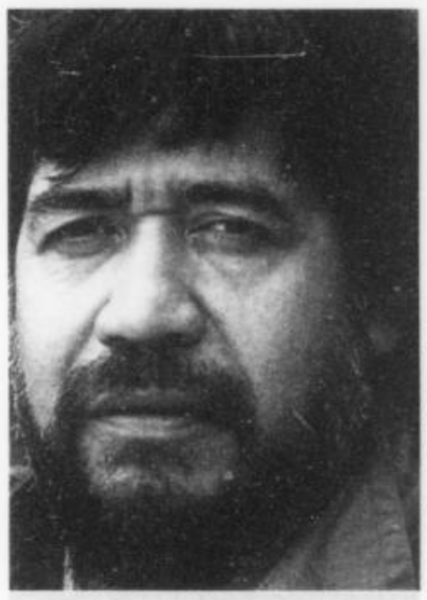
■ **Is concern for the environment winning out over the political commitment that typified so many Latin American writers of the previous generation?**

L.S.: They go hand in hand. Literature cannot change reality, but it can reflect—*re flect upon*—a very important aspect of it. Rediscovering ecological dignity is very much a political struggle. Some present-day writers, like Paco Taibo or Rolo Diez, are just as politically committed as their predecessors were, but they approach political matters from the angle of historical memory, by reference to what has happened and what should neither be forgotten nor recur. Their approach is critical, not without passion but far removed from perfunctory militancy.

■ **Geography getting its revenge on history?**

L.S.: A revenge that is all the more necessary now that the new world order, although it has done away with the East-West confrontation, is constantly and increasingly exacerbating the North-South confrontation.

Latin America is part of the South. We are alone, but it is better to be alone than to keep bad company. A political project can't be built in a day. Our conception of time must inevitably be different from the North's conception, but we have the time.



© Sophie Bassouls/Sygma, Paris

I want to stimulate my readers to think and to sharpen their awareness of others

■ **Do you write to forget barbarism or to denounce it?**

L.S.: All that concerns me as a writer is that my readers should come to the same conclusion as my characters, that they should take notice of what is happening to them and think. I respect readers' freedom, and I have abolutely no wish to impose anything on them. All I aim to do is give them food for thought, thus helping them to discover the rules governing relationships with others, the rules of respect for others, with their culture and their traditions, and to sharpen their awareness of others, which is, incidentally, a tradition in adventure-story writing.

■ **How do you explain your fascination with travel and with the extremes of the natural world, the southern seas or the Amazonian forest?**

L.S.: I am not a city person. I like to spend a certain time in towns, but I need to come face to face with the elemental forces of nature, to prove to myself that I can survive on my own, relying on myself, and also to prove that the individual can live without being dependent on the state.

■ **Or on other people?**

L.S.: No, not on other people. We always need other people. Humans are social animals, but they oughtn't to get involved in relationships based on dependence or domination.

■ **You are internationally famous. How does that affect you?**

L.S.: Success came as a pleasant surpise, but my character hasn't changed. I'm happy to have freedom of movement and be free to decide what to do with my time, but it is above all a great responsibility to bear. I have an ethical position in relation to life and an aesthetic position in relation to literature. I would like the distinction to be understood, so that readers could say "I like Sepúlveda's books but I don't agree with his views" or "I like what he writes, so I would like to know his views". Literature is a means to an end. ■

LETTERS TO THE EDITOR

■ A REMARKABLE DICTIONARY OF CARIBBEAN ENGLISH

I wish to express my appreciation for the superb, eclectic coverage in your June 1997 issue ("How ideas travel"). I was struck by the variety of very interesting articles on subjects ranging from best sellers of the eighteenth century and the cyberspace virtual library to the interview with Viviane Forrester.

I should like to commend to you a remarkable work by Professor Richard Allsopp, the *Oxford Dictionary of Caribbean English Usage*. Perhaps you could review it or interview the author in a forthcoming issue. Caribbean English has been influenced by several different African, Indian, Chinese and Portuguese languages and various forms of "British English". It is a tremendous blend!

WILLIAM HERBERT
Vancouver (Canada)

■ A RADIO MILESTONE

I read with great interest your February 1997 issue ("Radio, a future for sound"). In the "Milestones in radio" feature, however, I was disappointed to see no mention of the world's first regular radio broadcasts, which began on 27 August 1920 from Buenos Aires's El Teatro Coliseo. Broadcasting from this station, under the name LR2, has continued right until today.

The author may not know of the Buenos Aires event, but UNESCO cannot be unaware of the birth of this regular radio service. In many countries 27 August is celebrated as "World Radio Day" in commemoration of this first broadcast made from Buenos Aires.

ENRIQUE BRAVO
Buenos Aires (Argentina)

Thank you for pointing this out. Editor

■ UNESCO RADIO

As a great radio fan and a faithful reader of your magazine, I particularly enjoyed your issue on radio.

You reported on UNESCO Radio but failed to mention its wave-length and air times.

P. JAMET
Argenteuil (France)

UNESCO's radio programmes are mostly used by national radio networks, and we cannot give dates and times of broadcasts in advance.

English-language programmes are, however, broadcast on short wave by Nexus-International Broadcasting Association and Radio for Peace International. For information about frequency and programme schedules, please contact:

☛ *Nexus-International Broadcasting Association, PO Box 10980, I-20110 Milano, Italy. Tel: + 39 2 266 6971 or + 39 337 297788; Fax: + 39 2 70638151; email: info@nexus.org*

☛ *Radio For Peace International, P.O. Box 88, Santa Ana, Costa Rica. Tel: 506 249 1821; Fax: 506 249 1095; email: rfpicr@sol.racsa.co.cr* Editor

■ NAMING NAMES

The Interview with Viviane Forrester in your June 1997 issue ("How ideas travel") was particularly interesting because it clearly named those responsible for the present economic situation. Most of the time your contributors write very well about poverty and destitution, war and peace, but unlike Vivane Forrester they never explain the reasons why the problems exist.

I wonder who will take the initiative of bringing together groups and individuals to denounce the present situation and, setting political divisions aside, to draw up a social blueprint that names the common "enemy" and proposes sound solutions? More than pious wishes and compassionate words are needed. Is this what the *Courier* intends to do? I am grateful to see that you have made a first step.

ANDRÉ PILET
Amfreville-s/les-Monts (France)

■ ASKING 'WHY' NOT 'HOW'

In his discussion of ethics and genetics in his "Science and Society (3)" Commentary in the May 1997 issue ("Landscape with Figures"), UNESCO's Director-General squarely addresses the issue of the responsibility of scientists.

Instead of questioning the ways we use science (the "how"), I believe it is increasingly urgent to ask the question "why". Why, for example, did we choose to produce energy using the atom when we can do so using water, wind and sun? If we had asked this question fifty or sixty years ago, we could have avoided putting atomic energy to other uses. In the field of bioethics, the right question to ask is not "how can we produce a perfect baby?" but "why should we produce a perfect baby?"

Addressing a problem by asking "why" rather than "how" is a far broader approach to problem-solving in the contemporary world.

PHILIPPE RECLUS
Saint-Barthélemy-le-Pin (France)

■ A DYNAMIC UNESCO ASSOCIATED SCHOOL

We should like to give you some information about our activities in the 1996-1997 school year.

Shortly after the start of the year, we translated the wonderful texts of UNESCO posters on Tolerance, Peace and Improving Human Relations; then we photocopied, coloured and distributed them to the other schools on our island.

In December we held an evening dedicated to UNESCO's 50th anniversary, at the end of which we exhibited and sold stationery produced by UNICEF (the United Nations Children's Fund).

In May 1997 In the context of the "Other countries, other cultures" project, we organized an evening devoted to the Kalas, a mountain people of Pakistan, provided background information about them and sold postcards to raise money to help them complete the new school they are building.

Finally, despite complications arising from the political situation, we continue to have close ties of friendship with the Turkish school in Gülük.

UNESCO Associated Schools
The teachers and pupils of Aghia Marina primary school, Leros (Greece)

THE UNESCO COURIER

will be taking part in EXPOLANGUES, the international fair of languages, cultures and travel, which is being held from 28 January to 1 February 1998 in the Grande Halle de la Villette, Paris. The *Courier*'s 27 language editions are testimony of a respect for cultural diversity fully shared by EXPOLANGUES, which presents a broad spectrum of language teaching techniques through a lively approach to the cultures of which they are part. Japan is this year's guest of honour.

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ADAM ROBERTS, of the United Kingdom, helped to prepare the first World Forum on Youth Recycling for Development (1996) and is currently engaged in research on the ethical implications of recycling.

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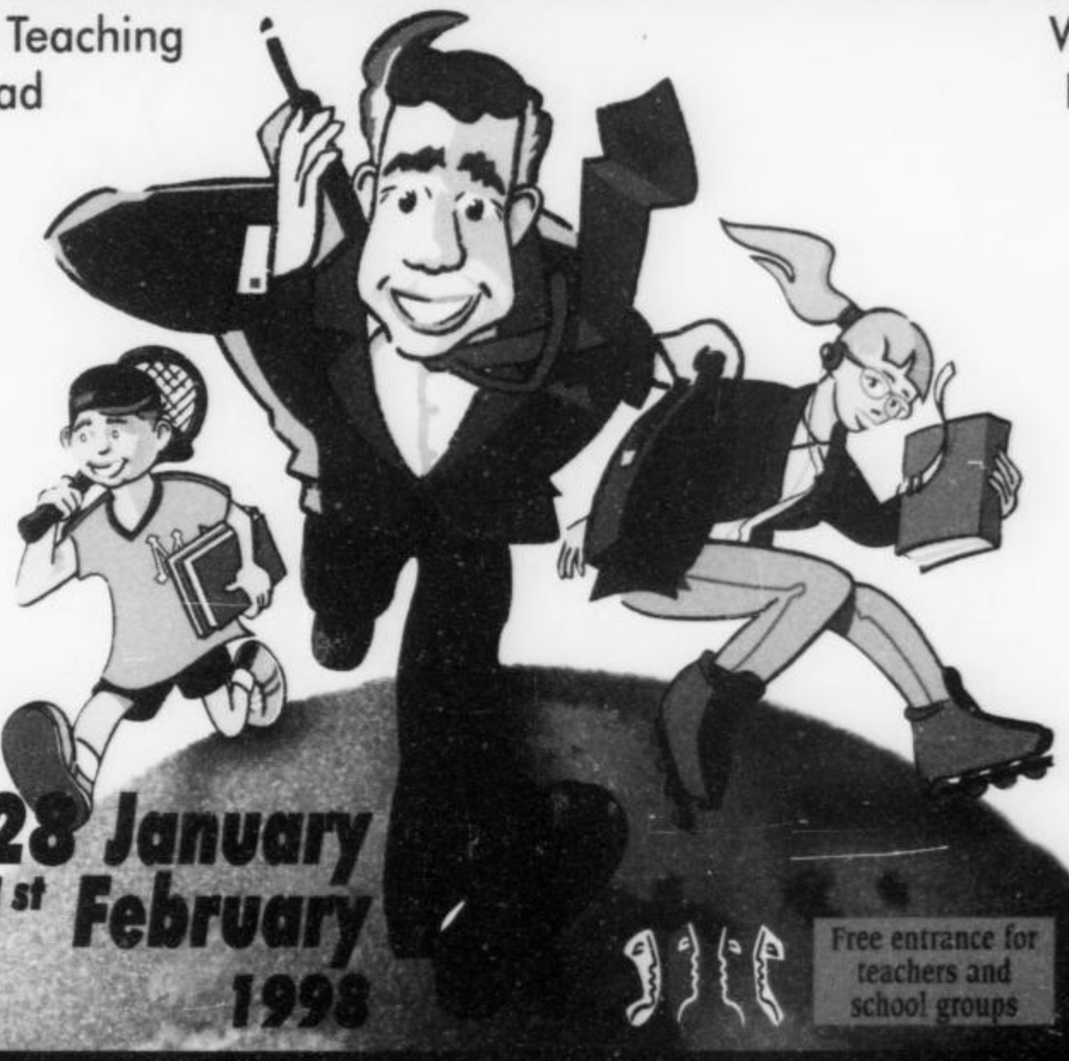

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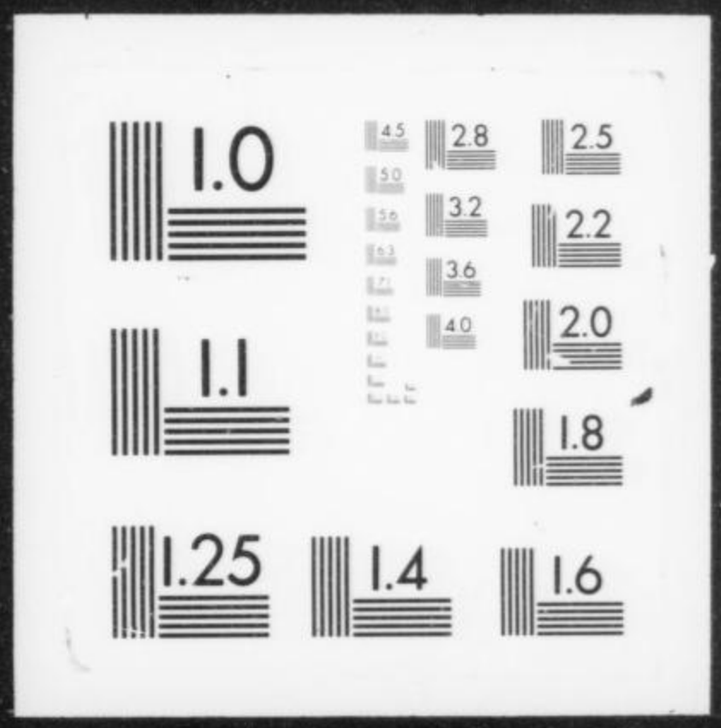
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